MEDICAL REPORTS

FOR THE

HALF YEAR ENDED 31ST MARCH, 1876;

FORWARDED BY THE SURGEONS TO THE CUSTOMS AT THE TREATY PORTS IN CHINA;

BEING No. 11 OF THE SERIES,

AND

FORMING THE SIXTH PART OF THE

CUSTOMS GAZETTE

NO. XXIX.—JANUARY-MARCH, 1876.

PUBLISHED BY ORDER OF

The Inspector General of Customs.

SHANGHAI:
STATISTICAL DEPARTMENT
OF THE
INSPECTORATE GENERAL OF CUSTOMS.

MDCCCLXXVI.

MEDICAL REPORTS

FOR THE

HALF YEAR ENDED 31ST MARCH, 1876;

FORWARDED BY THE SURGEONS TO THE CUSTOMS AT THE TREATY PORTS IN CHINA;

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National Oceanic and Atmospheric Administration

Environmental Data Rescue Program

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December 20, 2000

Inspector General's Circular No. 19 of 1870.

Inspectorate General of Customs,
Peking, 31*st December*, 1870.

SIR,

1.—It has been suggested to me that it would be well to take advantage of the circumstances in which the Customs Establishment is placed, to procure information with regard to disease amongst foreigners and natives in China; and I have, in consequence, come to the resolution of publishing half-yearly in collected form all that may be obtainable. If carried out to the extent hoped for, the scheme may prove highly useful to the medical profession both in China and at home, and to the public generally. I therefore look with confidence to the co-operation of the Customs Medical Officer at your port, and rely on his assisting me in this matter by framing a half-yearly report containing the result of his observations at.....upon the local peculiarities of disease, and upon diseases rarely or never encountered out of China. The facts brought forward and the opinions expressed will be arranged and published either with or without the name of the physician responsible for them, just as he may desire.

2.—The suggestions of the Customs Medical Officers at the various ports as to the points which it would be well to have especially elucidated, will be of great value in the framing of a form which will save trouble to those members of the Medical profession, whether connected with the Customs or not, who will join in carrying out the plan proposed. Meanwhile I would particularly invite attention to—

a.—The general health of.....during the period reported on; the death rate amongst foreigners; and, as far as possible, a classification of the causes of death.

b.—Diseases prevalent at.....

c.—General type of disease; peculiarities and complications encountered; special treatment demanded.

d.—Relation of disease to { Season. / Alteration in local conditions—such as drainage, &c. / Alteration in climatic conditions. }

e.—Peculiar diseases; especially leprosy.

f.—Epidemics { Absence or presence. / Causes. / Course and treatment. / Fatality. }

Other points, of a general or special kind, will naturally suggest themselves to medical men; what I have above called attention to, will serve to fix the general scope of the undertaking. I have committed to Dr. Alex. Jamieson, of Shanghai, the charge of arranging the reports for publication, so that they may be made available in a convenient form.

3.—Considering the number of places at which the Customs Inspectorate has established offices, the thousands of miles north and south and east and west over which these offices are scattered, the varieties of climate, and the peculiar conditions to which, under such different circumstances, life and health are subjected, I believe the Inspectorate, aided by its Medical Officers, can do good service in the general interest in the direction indicated; and, as already stated, I rely with confidence on the support and assistance of the Medical Officer at each port in the furtherance and perfecting of this scheme. You will hand a copy of this Circular to Dr. ....., and request him, in my name, to hand to you in future, for transmission to myself, half-yearly reports of the kind required, for the half-years ending 31st March and 30th September—that is, for the Winter and Summer seasons.

4.— * * * * *

I am, &c.,

(signed) ROBERT HART,
I. G.

THE COMMISSIONERS OF CUSTOMS,—*Newchwang*, *Ningpo*, *Tientsin*, *Foochow*, *Chefoo*, *Tamsui*, *Hankow*, *Takow*, *Kiukiang*, *Amoy*, *Chinkiang*, *Swatow*, and *Shanghai*, *Canton*.

ERRATUM.

AN apology is due to Dr. JONES, of Amoy, and is hereby tendered, for my inadvertence in wrongly ascribing to Dr. MÜLLER the Notes of Cases of Unusual Milk Secretion, contributed by Dr. JONES to the last number of these Reports.

R. A. J.

SHANGHAI, *1st November*, 1876.

SIR,

IN accordance with the directions of your despatch No. 6 *A* (Returns Series) of the 24th June 1871, I now forward to the Statistical Department of the Inspectorate General of Customs the following documents:—

A.—Report on the Health of Chefoo, for the year ended 30th September 1875, pp. 1-10;

B.—Report on the Health of Chinkiang, for seven months ended 31st March 1876, pp. 11-13;

C.—Report on the Health of Kiukiang, for the year ended 31st March 1876, pp. 14-20;

D.—Report on the Health of Tamsui and Kelung, for the year ended 30th September 1875, pp. 21-23;

E.—Report on the Health of Takow and Taiwan-fu, for the half year ended 31st March 1876, pp. 24-26;

F.—Report on the Health of Ningpo, for 1875-76, pp. 27-28;

G.—Report on the Health of Swatow, for the half year ended 31st March 1876, p. 29;

H.—Report on the Health of Amoy, for the half year ended 31st March 1876, p. 30;

I.—Report on the Health of Foochow (Pagoda Anchorage), for the half year ended 31st March 1876, pp. 31-46;

K.—Report on the Health of Tientsin, for the half year ended 31st March 1876, p. 47;

L.—Report on the Health of Shanghai, for the half year ended 31st March 1876, pp. 48-57.

A considerable amount of manuscript is already in my hands for publication in the next volume.

I have the honour to be,

SIR,

Your obedient Servant,

R. ALEX. JAMIESON.

THE INSPECTOR GENERAL OF CUSTOMS,
Peking.

The Contributors to this Volume are—

J. R. CARMICHAEL, M.D., F.R.C.S.E., ... Chefoo.

A. R. PLATT, M.D., ... Chinkiang.

J. JARDINE, M.D., CH. M., ... Kiukiang.

B. S. RINGER, M.R.C.S., L.S.A., ... Tamsui and Kelung.

T. RENNIE, M.B., CH. M., ... Takow and Taiwan-fu.

J. H. MACKENZIE, M.D., ... Ningpo.

C. M. SCOTT, L.R.C.S.I., ... Swatow.

D. MANSON, M.D., CH. M., ... Amoy.

J. R. SOMERVILLE, M.D., F.R.C.S.E., ... Pagoda Anchorage, Foochow.

J. FRAZER, L.R.C.S.I., L.R.C.P.E., ... Tientsin.

R. ALEX. JAMIESON, M.A., M.D., ... Shanghai.

A.—Dr. CARMICHAEL'S Report on the Health of Chefoo for the year 1st October, 1874, to 30th September, 1875.

THERMOMETER.

1874.							1875.																			
Day.	Oct.		Nov.		Dec.		Day.	Jan.		Feb.		March.		April.		May.		June.		July.		August.		Sept.	
	°	°	°	°	°	°		°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°
1	66	71	40	60	32	45	1	22	30	23	38	33	58	32	53	45	58	64	75	65	74	80	90	70	77
2	66	71	40	70	33	48	2	23	32	25	45	31	47	40	70	47	65	63	74	66	77	78	80	71	75
3	66	70	42	60	31	48	3	23	33	26	50	27	42	40	60	48	58	64	76	64	76	75	80	70	76
4	67	70	42	75	32	42	4	23	33	22	50	29	60	44	70	53	65	64	76	67	75	74	84	74	78
5	65	68	47	65	32	40	5	23	38			40	70	38	68	55	65	64	77	68	79	75	85	76	82
6	65	68	41	64	34	43	6	23	32			43	60	30	55	53	80	64	70	67	80	76	86	74	80
7	63	68	41	70	32	45	7	23	32			39	55	33	65	48	60	66	74	66	79	78	85	68	76
8	65	68	45	70	31	44	8	27	40			32	48	35	72	50	60	64	72	66	76	75	84	65	75
9	64	68	42	60	33	46	9	28	38	28	38	32	65	33	65	55	65	62	75	66	76	76	85	68	78
10	60	64	39	55	32	48	10	25	32	27	35	32	68	38	64	54	68	63	74	64	78	76	85	70	80
11	59	64	40	55	33	42	11	25	37	28	40	40	70	40	62	57	74	66	81	66	79	78	87	72	78
12	58	63	36	50	32	40	12	28	38	28	50	43	65	41	57	55	70	64	80	69	80	78	90	70	76
13	60	63	35	50	31	42	13	25	30	23	45	40	50	42	57	47	55	68	84	69	80	79	91	64	76
14	57	63	37	55	33	43	14	25	31	19	50	37	45	44	72	50	60	64	75	68	80	74	85	64	70
15	58	62	36	55	32	45	15	27	37	21	45	39	50	42	70	55	70	64	72	70	80	75	86	61	73
16	58	64	35	50	31	40	16	27	38	24	40	34	48	42	50	60	70	59	64	72	82	80	88	60	73
17	57	63	36	56	32	45	17	27	38	21	55	37	60	41	55	68	78	65	76	80	87	80	90	62	72
18	53	78	41	55	32	39	18	28	38	22	58	38	50	47	70	65	76	66	76	76	88	74	82	62	78
19	53	66	40	55	32	49	19	25	30	25	35			45	53	68	78	59	70	72	85	74	77	66	80
20	53	65	46	64	39	45	20	24	28	26	56			45	65	62	78	70	79	66	84	68	75	65	80
21	48	87	40	62	26	32	21	24	29	27	47			45	52	60	70	67	88	66	75	67	76	64	78
22	51	88	50	65	26	32	22	24	28	27	55			45	60	62	75	70	80	66	78	66	74	62	73
23	56	76	30	50	32	35	23	23	29	24	47	absent		47	65	59	74	69	80	69	84	65	76	62	76
24	48	68	25	32	25	34	24	23	33	30	59			52	62	59	66	65	76	70	80	67	75	64	75
25	46	60	29	31	26	35	25	23	32	27	50			46	55	60	84	64	73	70	80	67	76	62	75
26	47	52	29	30	25	37	26	23	30	26	46			47	55	58	66	65	78	74	85	66	80	58	76
27	48	53	30	38	17	38	27	19	29	26	65			42	56	56	64	68	76	75	85	68	77	60	72
28	40	50	31	40	15	22	28	24	32	27	70	40	52	43	58	58	68	68	76	76	86	68	78	64	73
29	41	53	32	38	18	27	29	19	30			36	48	42	54	55	62	66	76	74	84	67	79	63	73
30	38	56	31	48	18	30	30	19	30			32	49	43	55	58	65	68	78	78	84	69	80	58	72
31	39	50			18	25	31	25	45			34	50			64	70			78	88	76	83		

BAROMETER.

1874.			1875.								
Month.	Max.	Min.	Month.	Max.	Min.	Month.	Max.	Min.	Month.	Max.	Min.
October,...	30·58	29·93	January,..	30·61	30·00	April,.....	30·26	29·55	July, ...	29·95	29·58
November,	30·70	30·09	February,.	30·65	29·99	May, ...	30·30	29·75	August,...	30.18	29·76
December,	30·68	29·90	March, ...	30·80	29·85	June,.....	31·10	29·62	September	30·09	29·80

The above table of minima and maxima Thermometrical readings was kept by a gentleman in the settlement.
The readings from the Barometer were taken from an instrument on the Custom House Jetty.

THE health of the community has been unusually good during the past twelve months. Only one death occurred amongst the residents, and this was in the case of a child during dentition. There was a Malay seaman found drowned. A Malay died from frost gangrene. A seaman landed from an English vessel in port in a state of advanced pulmonary tuberculosis died a few days after he was brought on shore. A Japanese seaman on a German vessel died from "Japan fever." These cases comprise our bill of mortality for the above-mentioned period. The English and French squadrons were stationed here during the summer. There was one death on board H. M. S. *Audacious*. I shall add some notes kindly furnished me by Dr. BRION, fleet surgeon, on the health of the French vessels, and also notes on the health of the crew of the American corvette *Kearsarge* from Dr. RIGGS.

I have only had one opportunity for making a further trial with the Ailanthus Glandulosa in dysentery. This was in the case of a seaman who was suffering from a severe and acute form of the disease. The ordinary doses produced vomiting and distressing gripes. He was then given the preparation in minimum quantities, but he still complained of the stuff producing nausea, and as there was apparently no remedial effect to be expected from its continuance, I gave it up, and in its place prescribed mercury with chalk, and compound powder of opium, which produced speedy relief and complete recovery in the course of a fortnight. While on the subject of the ailanthus, I may mention that Dr. DUGAT, of Peking, has lately spoken to me in such high terms of the effects of this remedy in dysentery that I am encouraged to believe in the great utility of the drug where other means apparently fail. He was the first to introduce it to the notice of the profession in China, and he has had considerable experience of its use. At the onset of the cold weather there is generally a great increase of the cases requiring medical treatment on board vessels in port. There were a few cases of fracture last winter amongst seamen, and in every instance apparently from accidents in consequence of the benumbing effects of the cold. At this season venereal diseases are more acute. Buboes are common; gonorrhœa is more frequent, and often associated with orchitis. The symptoms of constitutional syphilis are excited in cases where the disease was dormant for many years and was thought to have disappeared. Subjects of malaria, to be mentioned further on, are apt to have a recurrence of their attacks at this time. Climatic diseases occurring amongst seamen here are similar to what may be found in other ports, but it is to be particularly noted that they almost always have their cause and origin elsewhere on the coast, having been contracted before their arrival. It is a significant fact, and speaks well for the salubrity of the climate, that fevers, dysentery and diarrhœa, so common and fatal in the south, are very seldom found here. There are mild cases of the latter which have their origin here on account of defective sanitary arrangements in supplying vessels with wholesome water. The fevers generally met with are of the intermittent type, and are contracted in the southern ports. During the last few years, Tientsin, on account of the inundations, has also furnished a proportion of our list of fever cases. Malaria long dormant in the system may become excited here from the cold and sudden change after a residence in a warmer and malarious climate; perhaps the majority of our cases of intermittent fever are of this nature, becoming developed in men who have been free from the disease for many months, and until they are exposed to our cold and severe weather. Such attacks are not generally repeated after small doses of quinine are given. The only other

fever observed amongst the shipping and worthy of mention is one occasionally introduced from Japan. All nationalities appear to be equally subject to its influence. The prominent symptoms are similar to those of typhus, but there is less regularity in its course than is observed in that disease. It is very contagious, often affecting a whole crew in the course of a few weeks. The rash is of the mulberry hue and appears early. There is often diarrhœa at the critical period. There is hæmorrhage and ulceration, with perforation in some cases. There is a deviation from the typical typhus in the duration of the disease, defervescence not taking place at such regular periods—hiccup sets in early, and is often severe, certain nervous symptoms persist it may be for weeks after convalescence. It is not uncommon to have facial or lingual paralysis even after slight attacks, and with a very slow tendency to disappear. Out of about fifty cases of this "Japan fever" which have come under my notice, I cannot recall more than two deaths. One was the case mentioned in the first lines of this Report—he arrived here in a dying state. A *post-mortem* examination showed intense congestion of the cerebral membranes, the spleen was soft, there was extensive peritonitis, which proceeded from perforation of the bowel. This was of course the immediate cause of death.

Gangrene from cold forms no small proportion of the cases occurring on board Siamese vessels. This affection is generally first met with early in October, when the winter winds begin to set in. The parts attacked are the hands and the feet, more frequently the latter. The men most subject to it are the cachectic and the debilitated, it being very rare to find it amongst the well-nourished and the robust. I have not seen European seamen suffering from the form of disease about to be described. During the intensely cold weather, when obliged to do duty aloft, Europeans are sometimes affected with swelling and blisters of the hands, from which they soon recover without any bad symptoms. It is chiefly amongst Siamese, Malays or Lascars that this affection is found. It is remarkable what a small degree of cold proves the exciting cause of this lesion. I have observed it frequently attacking several of a ship's crew who were previously comparatively healthy, after night and exposure to a temperature of 45°. The ordinary history of a case of this gangrene on board one of these vessels is that a seaman on watch is exposed to the cold until he feels uncomfortable, and as soon as opportunity offers he repairs to the cook-house or to a charcoal fire to warm himself. As may be expected, the reaction is severe. All the symptoms of inflammation supervene, and unless it soon subsides, we have gangrene taking place. In mild cases the disease does not extend beyond the toes or fingers, but not uncommonly the whole foot becomes involved, spreading, it may be, above the ankle or near the knee. This form of gangrene is seldom accompanied by severe constitutional symptoms, except, in some cases, during the first few days. There is very little fever, and the appetite and sleep continue unimpaired. The local disease does not generally encroach beyond the first observed defined mark of the discoloration of the skin, and the line of demarcation takes place at this situation. During the progess of the disintegration, the pulse exhibits a certain rapidity due to irritation, but there are no other general constitutional effects observable, the patients showing a cheerful or at least an indifferent behaviour even in instances where their extremities as far as the knee have become irremediably destroyed. This may be accounted for owing to the Asiatic temperament, but certain it is they often appear horribly unconscious of their desperate condition. I was called to see a case of this kind some years ago

by a captain who said that the patient had only been discovered to have the disease a few hours previously, but that he had been off duty for several weeks and confined to his berth in the den usually allotted to these coloured seamen. The officers had considered it to be a case of "skulking" on account of the cold weather, and had not taken the trouble to inquire further into the matter until it was accidentally brought to light on the morning I was sent for. On examination I found both legs gangrenous to the knees. The tibiæ and fibulæ, together with the osseous structure of the feet, to that extent were completely laid bare, and were held together merely by ligaments. There had been no hæmorrhage. The parts had been covered loosely by rags, and it was only when I removed them that the patient realized the full extent of the disease. He looked a little surprised and puzzled at first, and then said it was changed since it had been last uncovered, and that the rats which infested the vessel must have attacked him during the night. Having thus accounted for the cause, he relapsed into his usual indifferent manner. The pulse was a little rapid, but there was no fever, and he ate and drank as was his custom. I performed amputation of both extremities on this patient, which he bore with great fortitude and with no chloroform.

The hands and fingers do not suffer more than to the destruction of the tips of the fingers, or at the most to the loss of the phalanges. The course of the disease as observed here is generally decidedly chronic in its nature, and may continue for months, until the slough separates, until surgical assistance is called, or until they die from long continued irritation or from septicæmia. But there are exceptional cases which run a more rapid career, setting in with great constitutional disturbance, high pyrexia and severe prostration, although the local symptoms seem by no means to warrant any serious apprehension. The local disease may be limited to the toes, but accompanied by high fever and inflammatory pulse, wandering delirium, the countenance sunken and of a greenish yellow tinge, clammy sweats, and all the appearances of septicæmia, death taking place in the first week of the invasion. I was consulted in the case of a robust looking negro on board a Siamese steamer. The patient complained of a dull and aching pain in the heel, which he said had troubled him for the last two days and had come on after exposure to the cold. He had put the foot into hot water, which aggravated the symptoms. I found swelling and a slight discoloration, but evidently a case of progressive gangrene. The patient was in a state of high fever, hot skin and bounding pulse, and with severe headache. I prescribed the usual remedies and left him on board. Owing to the severity of the weather, I was not able to see him again for some days. He grew rapidly worse, and died on the sixth day from the first attack. I inspected the body shortly afterwards, and it presented all the appearance of blood poisoning. The treatment pursued in these different forms of gangrene, when the inflammatory symptoms have fully set in, has been the continuous use of warm poultices, with spirit of camphor or carbolic acid added. Charcoal is also useful during the separation of the sloughs. The poultices seem to arrest the further progress of the disease in many cases, they favour the setting up of a benign action, and in promoting the line of demarcation taking place sooner than it would without the use of these means.

The practice of making incisions to relieve tension I have found to do no good, and believe that in more than one instance I have seen it aggravate the symptoms—the disease rapidly extending within a few days of its employment. In cases where amputation was inevitable, it has been my practice to operate above the line of demarcation. The results have in

many cases been unfavourable; not unfrequently the gangrene has recurred in the flaps even after a second operation. A case which occurred in this practice this year is an example of a more satisfactory result. The patient was brought on shore from a German vessel manned by Malays. He was, moreover, a fine healthy looking subject. He contracted the disease during the cold weather, and on exposure for several days when his vessel was stranded in one of our most severe gales. The case was seen early, but in spite of every care the inflammation ended in gangrene. The line of demarcation took place above the ankles. Both legs were affected. I performed amputation, below the knee, of each extremity. There was great prostration for some days, but ultimately the patient recovered, with good stumps. The veins in this disease are distended in the vicinity of the affected parts, and the only hæmorrhage which may prove troublesome is venous. The constitutional treatment is conducted according to the particular case, to meet the prominent symptoms. Nourishing diet and opium form the chief remedies, occasional recourse being had to bark and wine. I have not seen an instance of recovery from the acute form of the disease. In these cases large doses of opium form the chief remedy. In connection with the subject of this dreadful disease, I may make a few further remarks. Siamese vessels carry very large crews. They are of larger tonnage than those of any other nationality trading at this place. The men exist chiefly on rice and vegetables. They are provided with clothes for a warm climate only, and in consequence suffer severely from our cold weather. They live crowded together in a small space at the fore part of the vessel, which is always foul and unwholesome, but becomes a perfect pest-house if infectious disease breaks out. These vessels are owned by Chinese merchants in Siam. The captain and chief officer are Europeans. A Chinese supercargo accompanies each vessel, who has complete control, the captain being merely in the position of sailing master. Siam has no treaty with China, so that no consul can be provided at the different treaty ports. The protection of these men is thus left to themselves or to the local Chinese authorities. This anomalous state of matters is in many cases the cause of great evils, one of which has an evident bearing on the affection already described. When sickness breaks out, these poor fellows are generally left without any medical assistance, the only exception being where the captain makes a strong representation of the difficulties they may have to encounter with the authorities if the case terminates fatally. At the last moment a medical man may be summoned, but only to find the patient past recovery or already dead. The effect of this want of common humanity is not always confined to the unfortunate Malays, but in the event of infectious disease the welfare of the whole shipping community may become involved. In the autumn of 1866 cholera and small-pox were imported by these vessels, and in this way propagated amongst the shipping, when timely medical assistance and the segregation of the sick might have arrested the spread of the disease.

Stricture and Perineal Abscess.—A Lascar was landed from a vessel to be treated for this disease, which was of more than a year's standing. There were several collections of pus, some of which were open and giving a passage to the urine, which dribbled away in great quantity. The stricture was of a hard and gristly nature. He was under observation for about a fortnight, and very much benefited from the treatment of the stricture, when the poor fellow was discharged from his vessel and handed over to the care of a crimp who had agreed to give security that the man should not come on the authorities for relief. The patient was thus lost sight of and

probably shipped on board another vessel in as bad a condition as ever, as soon as his dollars were spent in the house of entertainment kept by his security. My object in mentioning this case is to direct attention to the ordinary system of discharging seamen, which is obviously so bad and its effects so well illustrated by the foregoing instance. It is usual also for men with constitutions seriously impregnated with syphilis to be thus shipped and discharged from vessels without any medical inspection, and with no regard whatever either to their physical fitness for duty or to the probability of their cases being greatly aggravated from lodging in a grogshop. These institutions, considering the size of the place, abound at Chefoo, and their chief business is to vend liquor and afford a "home" to seamen. English sailors appear to prefer strong spirit, and here they obtain it in perfection. The stuff sold as brandy in these places is simply poisonous, and its effects are observable some days after a debauch on leave. I wish to avoid being sensational, but I must refer to the dangerous nature of the drink sold in these houses. It is sold in the first instance by Chinese shopkeepers at a very cheap rate. Some year ago there was a great quantity imported by a Canton Chinaman and sold at $2 a dozen. The bottles were substantially and beautifully got up, and it was evident that the price at which it was sold would barely cover the expenses of the mere bottles and freight from Europe. The direct effect of the importation was increased sickness amongst the shipping, and one case occurred of a Chinaman which ended fatally. He lived at the village of Ke-san Lo. He was a bumboat man, and had obtained the "poison" from some sailors while in the exercise of his vocation afloat. I was called to see him, and on arrival found he had died soon after reaching his home. It appeared he had drunk about eight ounces of this liquor, after which he rapidly fell into a comatose state. At about the same time a cardiac case landed from a British vessel in one of these houses terminated fatally, the exciting cause being, in my opinion, the drinking of this unrectified spirit. When a seaman lands he is liable to be accosted by emissaries from the grogshops, who are constantly on the look-out for customers. These men, who go by the name of crimps, visit the vessels in the harbour, making the acquaintance of the seamen, and inviting them to their respective haunts. They often persuade Jack to take unfair means to procure his discharge from his ship, the result of such a course being that the man is discharged by the Consul and the crimp is taken as a "security" who receives his victim with his dollars—another vessel is procured neither sooner nor later than the money lasts.

The winter was remarkably mild. There was very little snow, and the frosts were only occasional. With the exception of certain forms of catarrh and simple rheumatoid affections, there was nothing worth recording amongst the residents. Catarrhs are not common amongst the adult Europeans during our severe winter weather. I am rarely called upon to prescribe for that most troublesome of affections, simple cough, at any season of the year.

Laryngeal Catarrh, amongst children, is an ordinary complaint during the autumn and spring months. This affection is so common that there is scarcely a child under three years of age who is not subject to it to a greater or less degree. It appears to be excited by the extremely dry weather prevailing at the season in question. Its invasion is sudden, commencing at night; the child wakes in great alarm, with difficulty in breathing. On examination there is pyrexia, high pulse and hoarse respiration, sometimes accompanied by a crowing noise. There is cough, which is hoarse, and there may be frequent spasms. The temperature often rises at this stage to

104°. The pharynx is found to be more or less inflamed and congested but not always preventing free deglutition. These symptoms vary in intensity in the respective cases, and the acute period generally subsides within forty-eight hours of the onset of the attack. For several days subsequent to this subsidence there is free secretion from the bronchial surfaces. The prognosis is invariably favourable, no fatal instance having occurred in this practice, although the sudden onset, rapid pulse, high fever and peculiar cough would lead any one unfamiliar with such cases to believe these symptoms to be of very serious import—it would be difficult for them at first to believe that these cases were not severe examples of true croup. Left to nature, the tendency of this catarrh would be to recovery; but I have found a treatment by ipecacuanha emetics, small doses of grey powder repeated frequently, and bromide of potassium to produce ease or to cut short the attack. Occasionally, on the disappearance of the laryngeal symptoms in the manner described, the trachea becomes further involved, spreading to the ramifications of the bronchi, and eventually terminating in profuse bronchorrhœa. The attack may thus be prolonged for several days. At this stage stimulants and expectorants are serviceable. This disease is unquestionably one of simple congestion of the lining membrane of the respiratory passages, but the feature of interest which it claims is the great similarity which it bears in general symptoms to that fatal affection of childhood, true croup, where the characteristic pathology is the plastic exudation.

The great heat during the past summer, as given by the thermometer in our table, did not appear to affect the health of our community. There were very few visitors from the south, so that I have not to record the ordinary cases of alvine catarrh and fever which generally come under notice at that time. An example of pernicious malarious fever, in which the cold stage was intense and dangerously prolonged, was imported from the south. The patient was pulseless and deeply cyanotic for twenty-four hours. There was incessant vomiting. He was treated with enemas of beef tea and carbonate of ammonia, which gradually revived the circulation. He was also given hypodermic injections of quinine.

There were several subsequent tendencies towards collapse, but the patient ultimately got well after a somewhat protracted convalescence.

Memo. from Dr. Brion, Fleet Surgeon, French Squadron.

Quatre bâtiments de la Division Navale Française (*Montcalm, Décrès, Talisman* et *Surprise*) ont séjourné sur la rade de Chefoo du 23 Août au 22 Septembre, 1875 (un mois en moyenne pour chaque bâtiment).

Un décès a eu lieu à bord du *Décrès* et a été déterminé par la dysenterie chronique, maladie qui avait été contractée en Cochin-chine depuis un an environ, et qui a causé la mort à la quatrième rechute. Plusieurs autres cas de dysenterie ou de diarrhée chronique existaient depuis plus ou moins longtemps à bord des divers bâtiments: quelques-uns ont été avantageusement modifiés par le climat auquel il faut joindre l'action plus ou moins efficace de l'ailante et l'action au moins aussi avantageuse du régime lacté. D'un autre côté, ces affections des voies digestives ont rencontré à Chefoo diverses circonstances défavorables:

1°.—L'eau délivrée en boisson aux équipages jusqu'au jour où l'on n'a plus employé exclusivement que l'eau distillée, était de mauvaise qualité et saumâtre. Les puits qui la fournissaient sont placés très près du rivage, dans les terrains de l'ancien Consulat de France; et dans le coup de vent du 18 ou 19 Août, l'eau de mer a pu filtrer jusqu'à ces puits à travers le terrain sablonneux.

2°.—L'usage plus ou moins immodéré des fruits (raisins, pêches, pommes, &c.), que les équipages peuvent se procurer facilement et en grande abondance.

3°.—Les changements de température. Bien que le temps ait été très beau d'une manière générale, et qu'il n'y ait eu pendant ce mois que trois ou quatre jours de pluie, les hommes ont été soumis à des transitions de température très sensibles entre le jour et la nuit, et ces refroidissements qui impressionnent plus facilement des organismes habitués aux chaleurs du sud ont occasionné des nombreux cas d'entérite catarrhale.

Ces mêmes transitions de température ont donné naissance aussi à un grand nombre de cas de grippe et de bronchite simple, particulierèment durant la première moitié de la relâche. Aucune affection grave de la poitrine n'a été observée.

Pas d'accidents qui puissent être attribués à l'insolation proprement dite; les courses au soleil au milieu de la journée, présentent ici beaucoup moins de danger que dans les pays du sud de la station.

Pas de fièvre paludéenne contractée à Chefoo; un accès pernicieux a été observé sur un matelot du *Talisman;* mais l'impregnation palustre existait antérieurement et s'était déjà manifestée par plusieurs accès de fièvre intermittente.

Les hommes atteints d'anémié pure et simple sans complications, paraissent avoir retiré des grands avantages du séjour de Chefoo, dont le climat pendant les mois de Juillet, Août et Septembre nous paraît le plus sain de la station, offrant à peu près la même température que le nord du Japon, et moins de pluie, moins d'humidité.

Aucune fièvre éruptive, aucune maladie épidémique.

Un cas de maladie vénérieuse (chancres moux) a été contracté à Chefoo par un matelot du *Montauban.*

Chefoo, *le 22 Septembre*, 1875.

Memo. from Dr. RIGGS, of the American corvette *Kearsarge.*

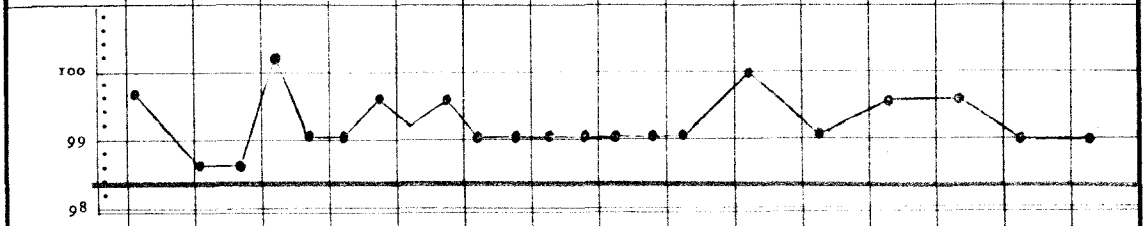
U. S. S. Kearsarge.

Jacob LENAT, landsman, ætat 30, of French parentage, though born in the U. S., by occupation a cook, is now berth deck cook. Is of small stature, with a half whispering voice. Disease:—Pneumonia acuta. October 18, 1875—Has severe abdominal pains. Given full opiate to relieve cramps, and followed by cathartic. October 19—Has bad "cold," headache, colicky pains. October 20—Headache, cough and whitish viscid expectoration, slight pain over lower lobe of left lung, harsh respiration, crepitant rales, with dulness of percussion over the same. Great dyspnœa with marked prostration; pulse 52, respirations 40, temperature 99.5° F. October 21—Stools 4, tongue dry with tip red, pain same, cough looser, sputa streaked with blood, increase of dyspnœa and prostration; pulse 48, respirations 38, temperature 98.4°. October 22—Pain severe over portion of lung involved, tongue coated; prostration, cough and sputa about the same. 9 A.M.—pulse 54, respirations 44, temperature 100.2°. 6 P.M.—pulse 48, respirations 36, temperature 99°. October 23—This afternoon and evening the worst he has spent; surface hot, patient restless. 9 A.M.—pulse 40, respirations 40, temperature 99°. 6 P.M.—pulse 48, respirations 56, temperature 99.5°. October 24—Less pain and prostration, breathes easier, expectoration scanty, feels better; pulse 44, respirations 38, temperature 99.2° at 9 A.M. From this time patient slowly but steadily improves, with pulse, respirations and temperature as shown by fever chart.

LENAT has been on sick list two or three times in last year with bronchitis, and his pulsations as recorded then were between 70 and 84 beats per minute. His pulse has increased in frequency since convalescing; no complications could be discovered.

The peculiarity of this case is the singular contradiction between the pulse and temperature and the general symptoms, as the symptoms were such as usually accompany a pulse of 120 or more, and a temperature of 104° or 106° Fahrenheit.

Date—Oct.	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3
Day of Disease.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	M. E.	M. E.	M. E.	M. E.	M. E.	M. E.	M. E.	M. E.	M. E.	M. E.	M. E.	M. E.	M. E.	M. E.	M. E.
Pulse, ...	52	48	54 48	40 48	44 44	48	60	48	54	64	56	60	56	60	64
Respirations,	40	38	44 36	40 56	38 40	40	29	36	44	40	40	38	32	32	32
Stools, ...	2	4	1	0	1	1	1	0	1	1	1	1	1	1	1



Officers 18, crew and marines 186,—total 204.

Cases comprising sick list on arrival at Chefoo, China, September 4, 1875 :—

Febris intermittens,	1	Distortio,	1 (ankle)
Bronchitis acuta,	1	Syphilis,	1
Orchitis,	1	Suppurating non-specific bubo,	1
Contusio,	1 (slight)		
Total,	7.		

Cases admitted to sick list from September 4, 1875, to November 4, 1875, while at Chefoo, China:—

Diarrhœa acuta,	18	Syphilis prim.,	6
Dysenteria ,,	4	,, consect.,	1
Bronchitis ,,	4	Orchitis,	8
Pleuritis ,,	1	Strictura urethræ,	1
Pneumonia ,,	1	Cystitis acuta,	1
Coryza,	1	Furunculus,	5
Febris intermittens,	2	Abscessus,	1
Cephalalgia,	1	Synovitis,	2
Delirium tremens,	1	Contusio,	6

Total admissions, 64. Number of sick days, 555. Average number on sick list each day, $9\frac{1}{4}$. Average number on sick list for one year, ending September 30, 1875,—$8\frac{3}{4}$ per diem.

Remarks:—The case of cystitis is result of gonorrhœa of long standing, and two cases of orchitis were from the same cause.

The two cases of febris intermittens did not originate in this port.

Two cases of primary syphilis did not originate here. Two cases of orchitis, cause unknown, not specific. The two admissions with synovitis were one man admitted twice, originated while aboard the U. S. S. *Monocacy*.

No unusual exposure in either case of pleurisy or pneumonia. The latter case is berth deck cook, and subject to attacks of bronchitis. Most cases of diarrhœa obstinate, crew allowed to buy fruit and vegetables from bum-boat, as in other ports.

Cases on sick list after two months' stay in Chefoo harbour, ending November 3, 1875:—

Diarrhœa acuta,	3	Cystitis acuta,	1
Dysenteria (chron.),	1	Orchitis,	3
Pneumonia acuta,	1	Syphilis prim.	3
Pleuritis ,,	1	Contusio (slight),	1
Total,	14.		

Remarks:—Pneumonia patient convalescing. The case of pleurisy complicated with renal and abdominal complications.

Although the weather has been delightful most of these two months and the air dry, as shown by the hygrometer, and certainly bracing, yet any observations upon the climate would be out of place, as none of the diseases above mentioned could properly be attributed to climatic influences, which perhaps is sufficiently complimentary.

Number of days on which rain fell, 12. Number of hours of rain, 31.

B.—Dr. A. R. PLATT's Report on the Health of Chinkiang for seven months ended 31st March, 1876.

THE very short period during which I have resided at this port, together with the almost entire absence of the native element from my practice, bears its natural fruit in this comparatively meagre and valueless report, and I do not feel warranted in giving my opinion at this time on many subjects to which my attention is directed by the circular of the Inspector General, No. 19 of 1870. For the subjoined meteorological record, I am indebted to Mr. R. J. GOLDSPINK, Harbour Master, and in conjunction with it, I would suggest that the value of these tables, as a comparative climatic record, would be enhanced if uniform hours were adopted for the reading of instruments throughout treaty ports.

It is to be regretted that the Customs establishment is so poorly provided with instruments, as many necessary ones are either entirely wanting, or are very unreliable.

Table showing barometric pressure and temperature, for the months of September, 1875, and March, 1876, and the interval:—

MONTHS.	BAROMETER.		THERMOMETER.		PREVAILING WINDS.
	Max.	Min.	Max.	Min.	
September, 1875,	30·62	30·10	89°	61°	E.
October, „	30·87	30·48	79°	51°	N.E., E.
November, „	31·07	30·48	67°	33°	N., N.E.
December, „	31·25	30·63	55°	20°	N.W., E.
January, 1876,	31·25	30·74	49°	18°	N.N.E.
February, „	31·08	30·55	54°	32°	E.N.E.
March, „	30·95	30·09	76°	36°	E., ranging from N.N.E. to S.E.

The instrument from which this record was taken is an aneroid barometer with thermometer attached. The readings of the barometer are supposed to be somewhat higher than would have been recorded by a mercurial instrument. The hours at which the observations were made were 8 A.M., noon, and 4 P.M.

The health of the foreign community has been good, and yet scarcely an individual of it but what has been afflicted with some form of disease, more or less grave; but all cases have yielded readily to treatment, doubtless due to the exceptionally healthy surroundings.

No death among foreigners has occurred, if we except the case of presumed aneurism, who died, I am told, an hour before reaching the port. Small-pox has been epidemic, and deaths in the city and suburbs very numerous, but the three cases recorded were so very mild in form, that they more properly come under the head of varioloid.

The following is a list of diseases of foreigners and natives treated during the past seven months:—

A.—General Diseases.

Influenza,	2 cases.
Parotitis,	1 „
Small-pox,	3 „
Varicella,	1 „
Erysipelas,	1 „
Intermittent Fever,	7 „
Dysentery,	2 „
Diarrhœa,	4 „
Constitutional Syphilis,	6 „
Rheumatism,	3 „

B.—Local Diseases.

Of the Nervous System:—

Alcoholism,	1 „
Vertigo,	1 „
Hydrocephalus,	1 „
Paralysis, *	1 „
Neuralgia,	2 „

Of the Digestive System:—

Atonic Dyspepsia,	3 „
Hæmatemesis,	1 „
Ptyalism,	1 „
Angina simplex,	4 „
Caries of Teeth,	6 „
Constipation,	7 „
Intestinal worms,	4 „
Hæmorrhoids,	2 „
Ulcer of Anus,	1 „
Hernia,	2 „

Of the Peritoneum:—

Peritonitis, †	1 „

Of the Liver:—

Hepatalgia,	1 „
Congestion,	4 „
Jaundice,	2 „

Of the Lungs:—

Pneumonia,	2 „
Syphilitic affection,	1 „
Bronchitis,	3 „
Pleurisy,	1 „

Of the Genito-Urinary System:—

Hæmaturia,	1 case.
Nephritis,	1 „
Gonorrhœa,	2 „
Phimosis,	1 „
Bubo,	1 „
Gleet,	1 „
Stricture,	1 „

Of the Circulatory System:—

Aneurism,	1 „
Valvular disease,	2 „

Of the Eye:—

Conjunctivitis,	1 „
Purulent Ophthalmia,	9 „
Ulcer of Cornea,	1 „
Cataract,	1 „

Of the Ear:—

Perforation of tympanum,	1 „
Ulceration „ „	1 „

Of the Cutaneous System:—

Eczema,	1 „
Rupia,	1 „
Furunculus,	4 „
Abscess,	1 „
Ulcer,	3 „
Scabies,	3 „

Diseases of the Organs of Locomotion, Injuries, &c.:—

Periostitis,	1 „
Nodes,	1 „
Synovitis,	1 „
Contusion,	2 „
Wounds,	5 „
Gunshot wound,	1 „
Fracture,	4 „
Burns,	7 „
Sprains,	2 „

Unclassified:—

Opium smoking,	3 „
„ poisoning, ‡	1 „
Carbonic acid gas poisoning,	2 „

* From fracture of ninth dorsal vertebra, occasioned by a fall of 15 feet. Double pneumonia supervened, and death on twenty-fourth day after accident. Temperature in axilla on fifth day, 107°. † Died. ‡ Died.

As I can find no account of Chinkiang in the previously published reports, I will briefly state it is a city situated on the south bank of the Yangtze Kiang, in Lat. N. 32° 12′ 50″, Long. E. 119° 26′ 41″, and has an estimated population of 150,000, which by immigration is rapidly on the increase. Situated but a short distance from Shanghai (150 miles), it is yet a port of considerable importance, and the centre of supplies for a vast area of country.

Of native productions I have seen few, and those of a very inferior quality, the best being silk fabrics, which are largely exported. Devastated by the invaders in the last rebellion, Chinkiang has but slowly recovered from the blow, and even at this late day shows constant signs of how she must have suffered. The surrounding low country is principally devoted to the cultivation of wheat and rice in successive crops, while the hills are devoted to the raising of stock, which forms an item of considerable importance in the list of exports.

The foreign community now numbers about forty persons, who principally reside on the British Concession, which, small at the best, has suffered severely for the past two years from the encroachment of the river, which is rapidly changing its bed. For the time being, further damage has been prevented by the construction of a new bund, but its efficacy is doubtful, and as yet untested.

To the south and east of the city are extensive chains of hills, ranging from 200 feet to 1,000 feet in height. On these the foreigners have caused paths to be cut, and one may wander for many miles amid scenery which excites the admiration of the most unappreciative.

Pheasant, deer, pig, and other game abound, and to the exercise required in the chase I attribute the unusually good health of this community, which is most singularly free from disorders dependent on excess in food and sedentary habits.

C.—Dr. J. JARDINE's Report on the Health of Kiukiang for the year ended 31st March, 1876.

DURING the past twelve months the health of this community has been good. No epidemics have prevailed among foreigners or natives, and no deaths have occurred among the former. The diseases that have come under notice, during the period reported on, have been of a mild type, and with two or three exceptions, have yielded to the usual treatment. The health of the Customs staff has been, with the exception of one case, excellent; and that case, one of chronic Bright's disease, will be noticed in a future number of these reports.

Dysentery.—Among foreigners one case of acute dysentery occurred, but as it came under treatment soon after development recourse was not had to ipecacuanha. A dose of castor oil and laudanum, perfect rest, and attention to appropriate regimen were sufficient to arrest it; and in this case there was no tendency to a relapse. Chronic dysentery was common among the natives during the autumn months, and those who applied for relief were treated with ipecacuanha and opium or acetate of lead and opium pills, but as they rarely return to report themselves, testing the relative efficacy of medicines becomes an impossibility, and practice among them is for many reasons unsatisfactory.

Diarrhœa.—Few cases of diarrhœa were treated among adult foreigners, but two obstinate cases occurred among children. They both were under two years, and in their early dentition period. In both the disease commenced immediately on the advent of the hot weather, in both it proved intractable, and in both was chronic from the first. In one, a similar attack during the previous summer was attended by precisely similar symptoms. The motions, which usually numbered from four to eight in the twenty-four hours, varied in appearance. Sometimes they were like dirty water of a brownish colour, at other times they were slimy and contained mucus with a streak of blood, and at other times contained green coloured matter. In one an eczematous eruption on the nates and inner parts of the thighs added to the discomfort of the little sufferer. Fortunately, one of the patients was taken home to the United States, but it was not until she arrived at San Francisco that improvement began to be manifest. In the other case—the sufferer of the previous year—no treatment tried seemed sensibly to improve his condition, until alum in one grain doses, administered as a last resource, ameliorated the symptoms; but by that time the little patient was dreadfully emaciated, the skin on the under surfaces of his arms and legs hanging in a flaccid state, his forehead wrinkled, and his aspect that of a little infirm old man.

During dentition diarrhœa is of so common occurrence among children that only a small proportion escape it, and it is regarded by many as a safety-valve in preventing convulsions. There can be no doubt that when nervous symptoms do supervene on dentition, these are seldom relieved until artificial or spontaneous diarrhœa occurs. In a large number of cases I have met

with, I believe, with Dr. EUSTACE SMITH, that "Perhaps dentition in these cases is not so entirely to blame as is commonly supposed. No doubt, during the cutting of the teeth, the bowels generally are in a state of irritability, for we know that at these periods the follicular apparatus of the intestines is undergoing considerable development. The bowels then are ripe for diarrhœa; there is increased sensitiveness to the ordinary exciting causes of purging; but without the presence of these exciting causes diarrhœa is by no means a necessary result of such a condition of the alimentary canal. We find that looseness of the bowels is a more common accompaniment of dentition in summer and autumn than in winter; that is, at a season when the changes of temperature are so rapid and unexpected, and when therefore the child is particularly exposed to sudden chills, rather than at a time of the year when the temperature, though lower, is more uniformly low, and when precautions are more naturally taken against cold. Dentition, too, commences at a period when the child is beginning to require additional food besides that furnished by his mother's milk, and consequently at a time when he is so liable to be supplied with articles unsuited to his age. Even if the diet be a suitable one for the infant when in health, it by no means follows that the same regimen should be found equally appropriate at the time when the febrile irritation set up by the advancing tooth has temporarily reduced his digestive power. The ordinary diet may then become indigestible, and therefore irritating to his bowels." (EUSTACE SMITH on *Wasting Diseases in Infants and Children.*)

These remarks apply in their full force to children in China, for, in addition to the vicissitudes of temperature to be withstood, they are generally suckled by native nurses, whose milk, though abundant, is often poor, and who refuse to take a more strengthening regimen to produce richness in the lacteal secretion. Children here thus require some additional nourishment, and this is best supplied to them at the dentition period, when there is a tendency to diarrhœa, in the form of cow's milk and lime water. In this outport, however, good cow's milk is a commodity which few can get, and then a difficult problem is presented for solution—what must be used as a substitute. In such a dilemma, Liebig's food for infants (Mellin's) has been found invaluable at home, and it has preserved the lives of many children. Here children soon dislike it or refuse to take it altogether, and then our dietary becomes narrowed down to beef tea, veal broth, or mutton tea, as farinaceous food is as a rule inadmissible at this period.

Urticaria.—Attention is solicited to this common but troublesome affection on account of a simple, cheap, and expeditious plan of treatment used by the natives in many parts of China, among whom the affection is prevalent. The variety that most frequently comes under observation is *Urticaria ab ingestis*—produced by eating shell-fish, pork, mushrooms, cucumbers, &c. Emetics, purgatives, bismuth, quinine and arsenic are generally sufficient to cure most cases, but the disease seldom disappears in less than a week or ten days by the use of these means, and sometimes lasts much longer. One patient who had suffered from this annoying affection for two days requested leave to try baths made by boiling common pinewood shavings in water. His skin was so sensitive that the least amount of friction readily produced the wheals. A dose of opening medicine and two baths of pinewood shavings were sufficient to permanently cure the disease. I have used it in three cases with equally successful results. The advantages which this method of treatment possesses over the usual one are its simplicity, cheapness and speediness in arresting

and curing urticaria. The pine (杉 san, 沙木 sha-muh) flourishes in the southern, central and western provinces of China, and is much used for house fittings and furniture, on account of its proof against erosion by insects. Tar seems to me to be the active agent in the bath, and as this is an agreeable way of using it, it may prove useful in this form in the other cases of skin diseases where this remedy is indicated. I was induced from my experience in the above cases to recommend it in an obstinate case of prurigo, and with constitutional remedies, it proved equally effective.

HEBRA'S treatment of urticaria is:—"Use cold baths,—or locally, diluted acids,—to allay itching, touch—not rub—with alcohol. If caused by indigestion, give an enema or cathartic to remove the cause."

The wheals seem due to spasm of the muscular fibres of the skin and effusion of serosity, caused by irritation of the vaso-motor nerves and consequent alteration of the vascular channels.

In the following table the readings of the thermometer for June, July, August and some quarters that this port is *excessively* hot during these

DATE.		JUNE.							JULY.						
		THERMOMETER.				OZONE.	WIND.		THERMOMETER.				OZONE.	WIND.	
		Air.	Wet.	Max.	Min.		Direction.	Force.	Air.	Wet.	Max.	Min.		Direction.	Force.
1	9 A.M.	68	67	68	65	9	N.E.E.	2	81	80	84	77	2	—	0
	5 P.M.	71	70	72	68		N.W.	2	86	85	89	80		—	0
2	9 A.M.	71	70	71	67	9	W.	5	88	87	88	80	2	S.W.	3
	5 P.M.	73	73	75	67		,,	5	92	90	92	87		,,	4
3	9 A.M.	75	72	75	68	7	N.W.	2	87	86	92	82	3	,,	8
	5 P.M.	78	75	79	73		,,	1	91	89	92	87		,,	6
4	9 A.M.	77	75	80	69	4	S.W.S.	1	87	86	90	84	2	,,	6
	5 P.M.	82	80	87	76		S.E.	1	92	91	94	87		S.E.	2
5	9 A.M.	78	76	83	72	7	—	0	88	87	93	84	2	S.W.	3
	5 P.M.	72	71	78	72		E.N.E.	3	92	90	93	87		,,	4
6	9 A.M.	71	71	74	70	8	,,	2	89	88	92	84	1	,,	6
	5 P.M.	72	72	73	70		—	0	93	91	94	89		,,	3
7	9 A.M.	70	70	73	70	9	E.N.E.	1	91	89	94	84	3	,,	3
	5 P.M.	72	72	74	70		W.	3	94	92	95	90		,,	2
8	9 A.M.	73	73	74	71	5	S.W.	1	88	87	94	84	4	,,	2
	5 P.M.	78	77	79	71		—	0	86	85	92	83		S.	1
9	9 A.M.	72	71	79	65	8	S.E.	1	80	80	90	80	4.5	S.W.	2
	5 P.M.	80	78	80	72		—	0	79	79	83	80		,,	2
10	9 A.M.	77	75	81	70	7	—	0	80	80	80	76	7	E.	2
	5 P.M.	84	82	86	77		S.E.E.	2	82	82	83	80		N.E.	3
11	9 A.M.	80	79	85	77	5	S.W.	3	77	77	83	76	6.5	E.	3
	5 P.M.	83	82	87	84		S.	3	81	80	81	78		,,	4

MÜNCHMEYER advocates the view that the condition depends primarily upon inhibition of the vaso-motor nerves, produced either by an external irritant or by the reflex action of some drug or other excitant "on the gastro-intestinal surface." (*London Medical Record*, 15th December, 1875.)

A Giant.—In the month of June last year, a man of unusual dimensions visited this port. He was a native of Hupeh, and twenty-two years of age. His wife, according to his statement, was then twenty-three, and he had been married nine years. Their offspring, a boy and girl, were respectively eight and six years of age. He had two brothers alive, respectively ten and fifteen years. His weight was then 298 lbs. or 21st. 4 lbs. His height was 6 ft. 10½ inches, the maximum circumference of his chest was 48 inches, and of his abdomen 49 inches. His calf measured 18 inches in circumference, and his foot was 13 inches in length. He spoke in a vulgar dialect, was evidently of low mental calibre, and lived by exhibiting himself and by mendicity.

September, have been given *in extenso*, with the hope of correcting an impression prevalent in months. The instruments used were NEGRETTI and ZAMBRA'S.

AUGUST.							SEPTEMBER.							Date.	
Thermometer.				Ozone.	Wind.		Thermometer.				Ozone.	Wind.			
Air.	Wet.	Max.	Min.		Direction.	Force.	Air.	Wet.	Max.	Min.		Direction.	Force.		
88	86	94	84	3	S.S.W.	2	77	75	83	75	6	N.E.	6	9 A.M.	1
93	92	94	92		S.	4	78	75	78	77		,,	3	5 P.M.	
89	87	92	83	1	S.W.	1	75	73	78	75	7	,,	5	9 A.M.	2
94	91	95	84		S.	1	75	74	77	75		,,	2	5 P.M.	
89	87	93	84	1	W.	1	77	75	76	75	1	,,	2	9 A.M.	3
94	92	94	85		N.E.	2	75	74	79	75		,,	2	5 P.M.	
91	90	94	85	3	,,	2	78	76	79	77	2	,,	3	9 A.M.	4
92	90	94	91		,,	3	77	75	79	75		,,	2	5 P.M.	
89	88	92	85	3	S.W.	1	81	79	85	77	1	,,	3	9 A.M.	5
92	90	92	90		S.E.	3	82	80	89	78		,,	3	5 P.M.	
90	88	91	84	6	,,	4	82	79	88	76	0	,,	1	9 A.M.	6
92	90	92	89		,,	3	84	79	94	79		N.E.E.	1	5 P.M.	
88	87	92	85	8	,,	4	76	74	95	76	7	N.W.	5	9 A.M.	7
92	90	92	88		,,	4	77	73	77	74		N.E.	2	5 P.M.	
88	87	92	82	5	,,	1	76	72	78	73	7	,,	2	9 A.M.	8
83	82	90	84		,,	4	80	74	81	76		,,	4	5 P.M.	
83	82	89	80	3	,,	3	82	79	83	76	3	,,	1	9 A.M.	9
89	88	90	83		S.	3	83	82	88	81		N.W.	1	5 P.M.	
85	84	89	83	1	—	0	75	72	85	74	7	N.E.	4	9 A.M.	10
92	91	92	85		—	0	76	71	85	74		,,	5	5 P.M.	
89	88	92	82	1	—	0	76	72	77	74	5	,,	4	9 A.M.	11
92	91	96	82		S.E.	3	80	73	80	74		,,	2	5 P.M.	

Date.		JUNE.							JULY.						
		Thermometer.				Ozone.	Wind.		Thermometer.				Ozone.	Wind.	
		Air.	Wet.	Max.	Min.		Direction.	Force.	Air.	Wet.	Max.	Min.		Direction.	Force.
12	9 A.M.	83	82	87	77	6	—	0	83	82	83	72	7·5	N.E.	1
	5 P.M.	76	76	86	77		S.W.	1	83	83	85	82		„	5
13	9 A.M.	78	78	82	72	6.5	„	2	83	82	85	78	7·5	„	3
	5 P.M.	78	78	80	75		—	0	84	83	85	82		„	4
14	9 A.M.	77	77	79	76	7	—	0	83	82	85	78	3	„	3
	5 P.M.	79	78	79	78		—	0	83	82	85	82		„	3
15	9 A.M.	79	79	80	76	0	E.	1	84	83	86	80	4	„	4
	5 P.M.	82	81	83	79		„	2	88	86	88	83		„	4
16	9 A.M.	83	81	86	77	4	S.W.	4	85	85	88	82	4	„	4
	5 P.M.	84	83	86	83		„	4	88	87	89	83		„	4
17	9 A.M.	74	74	85	73	7	N.	3	85	85	88	82	3	„	5
	5 P.M.	78	77	79	75		W.	1	92	90	92	90		—	0
18	9 A.M.	76	75	85	73	3	—	0	87	86	90	89	3	—	0
	5 P.M.	80	80	82	76		—	0	94	89	94	84		—	0
19	9 A.M.	79	79	81	77	7	N.E.	2	87	86	93	84	1	—	0
	5 P.M.	73	73	80	73		S.S.E.	3	92	91	91	86		S.	3
20	9 A.M.	77	77	78	73	7	W.	1	88	87	93	82	4	„	5
	5 P.M.	77	77	79	73		—	0	91	88	93	87		„	4
21	9 A.M.	81	80	81	76	3	S.W.	1	85	84	92	85	3	„	4
	5 P.M.	85	85	86	80		—	0	79	79	92	79		„	4
22	9 A.M.	74	74	81	73	7	S.W.	2	86	86	86	79	3	S.W.	3
	5 P.M.	75	75	80	74		„	2	86	85	90	85		—	0
23	9 A.M.	75	75	81	74	9	„	2	89	86	89	83	3	S.	1
	5 P.M.	76	76	82	75		„	1	92	89	83	85		—	0
24	9 A.M.	73	73	74	71	7	„	3	86	84	93	81	3	S.W.	1
	5 P.M.	71	71	77	71		N.E.	2	86	85	90	83		S.	1
25	9 A.M.	69	69	77	68	6	„	6	83	82	90	82	3	„	4
	5 P.M.	71	70	72	69		„	6	87	85	88	83		„	2
26	9 A.M.	72	71	73	70	5	W.	3	87	85	89	85	3	S.W.	6
	5 P.M.	73	72	75	72		„	3	92	90	92	87		S.	1
27	9 A.M.	73	73	75	71	5	„	1	88	87	92	85	2	S.W.	2
	5 P.M.	72	72	75	72		—	0	94	92	95	85		„	3
28	9 A.M.	75	75	76	70	3	—	0	90	88	92	85	2	„	2
	5 P.M.	79	78	80	75		E.	1	95	93	96	90		S.	2
29	9 A.M.	78	77	80	73	4	„	1	91	89	96	85	3	„	2
	5 P.M.	78	78	80	77		„	2	95	93	96	91		„	2
30	9 A.M.	80	79	80	76	3	—	0	90	88	95	85	3	„	2
	5 P.M.	83	83	85	79		—	0	91	89	95	89		„	1
31	9 A.M.	—	—	—	—	—	—	—	87	86	95	81	3	„	1
	5 P.M.	—	—	—	—		—	—	93	91	94	87		„	1

AUGUST.							SEPTEMBER.							Date.	
Thermometer.				Ozone.	Wind.		Thermometer.				Ozone.	Wind.			
Air.	Wet.	Max.	Min.		Direction.	Force.	Air.	Wet.	Max.	Min.		Direction.	Force.		
88	87	96	83	1	—	0	80	74	80	75	3	N.E.	1	9 A.M.	12
89	88	97	84		S.	3	81	75	83	74		„	1	5 P.M.	
86	85	94	83	3	„	1	78	77	81	75	0	„	6	9 A.M.	13
87	86	92	85		„	1	77	72	82	77		N.W.W.	9	5 P.M.	
83	85	92	82	6	—	0	65	64	77	65	7	N.E.	5	9 A.M.	14
92	90	92	85		N.E.	3	67	66	67	65		„	3	5 P.M.	
91	90	93	85	4	„	3	65	61	68	64	5	N.W.	2	9 A.M.	15
92	91	93	85		„	3	67	66	67	65		„	3	5 P.M.	
89	89	92	85	1	„	5	67	63	72	65	5	N.E.	1	9 A.M.	16
93	91	93	87		„	3	73	70	73	67		„	1	5 P.M.	
89	88	93	85	5	„	5	73	69	74	64	3	„	2	9 A.M.	17
91	84	93	84		„	6	77	74	77	71		„	2	5 P.M.	
81	80	91	80	5	N.W.	9	71	68	78	65	1	—	0	9 A.M.	18
85	84	86	81		„	9	78	71	78	71		—	0	5 P.M.	
81	80	86	79	5	W.	2	73	70	79	66	4	—	0	9 A.M.	19
84	83	86	80		„	3	81	78	82	73		E.	1	5 P.M.	
80	79	85	77	3	S.W.	2	73	68	83	66	3	„	1	9 A.M.	20
85	84	86	80		„	1	84	70	84	73		„	1	5 P.M.	
82	81	85	76	7	„	2	78	74	84	73	3	N.E.	2	9 A.M.	21
84	83	86	82		E.	2	85	74	85	73		„	3	5 P.M.	
82	81	85	78	6	E.	3	77	74	77	72	4	N.E.	5	9 A.M.	22
83	82	84	82		N.E.E.	4	85	80	87	76		S.	3	5 P.M.	
78	77	83	74	6	E.	1	70	69	84	70	5	S.W.	4	9 A.M.	23
82	81	83	78		„	3	69	68	71	68		„	3	5 P.M.	
78	77	82	73	4	—	0	69	67	70	68	5	W.	3	9 A.M.	24
84	83	85	77		N.E.	3	74	72	75	69		E.	4	5 P.M.	
79	78	84	75	7	E.	2	71	69	71	67	5	E.	4	9 A.M.	25
83	81	79	84		„	1	75	73	75	71		„	4	5 P.M.	
81	80	83	75	4	„	4	71	68	72	66	5	N.E.	2	9 A.M.	26
82	81	85	79		„	6	72	70	80	68		„	3	5 P.M.	
80	79	83	75	6	„	4	71	69	72	68	5	„	3	9 A.M.	27
86	85	86	80		„	4	78	74	80	74		—	0	5 P.M.	
80	74	86	78	5	„	4	81	78	85	78	5	—	0	9 A.M.	28
84	76	85	80		„	4	69	67	82	70		N.E.	4	5 P.M.	
81	74	85	78	3	„	4	69	68	71	69	6	N.	2	9 A.M.	29
84	76	85	80		„	3	69	66	71	67		N.E.	2	5 P.M.	
85	83	85	80	3	„	4	69	66	71	64	5	„	2	9 A.M.	30
88	79	89	84		„	3	69	68	72	61		„	1	5 P.M.	
81	80	89	81	1	„	5	—	—	—	—	—	—	—	—	31
81	77	83	80		„	2									

Months.	Thermometer.			Rain.	Prevailing Winds.	Months.	Thermometer.			Rain.	Prevailing Winds.
	Highest.	Lowest.	Average.	Inches.			Highest.	Lowest.	Average.	Inches.	
1875.	°	°	°				°	°	°		
						September	95	61	78	$4\frac{9}{10}$	N.E.
January,...	54	30	40	$\frac{3}{5}$	E. & N.E.	October,...	77	54	68	$2\frac{29}{100}$	,,
February,..	57	34	42	5	E.	November,	70	42	57	$\frac{11}{20}$	,,
March,.....	80	40	59	$6\frac{3}{20}$	S.E., N.E.	December,	59	24	44	$1\frac{3}{4}$	,,
April,.....	84	48	66	$6\frac{1}{20}$	N.E.&S.E.	1876.					
May,.....	90	62	57	$10\frac{3}{5}$	S.						
June,.....	87	65	76	$16\frac{1}{5}$	Variable.	January,...	48	23	36	$3\frac{1}{5}$	,,
July,..... ..	96	72	86	$3\frac{1}{25}$	S. & S.W.	February,..	57	34	44	$5\frac{9}{20}$	,,
August,....	97	73	85	None.	E. & S.E.	March,.....	75	42	56	$4\frac{9}{20}$	,,

From the foregoing table it will be observed that in the month of June, 1875, the rain-fall amounted to $16\frac{1}{5}$ inches, the greatest in the year. Whether due to this cause or not, the river had risen rapidly, and on the 24th of the same month the water had partially covered the lower end of the bund and inundated many portions of the native city. The plains in the immediate vicinity and on the north side of the Yangtze for miles were deluged, so that the only out-door recreation available was in boating, or in walking round the city walls. The floods continued for nearly one month, but never entirely prevented pedestrian communication in the Concession itself. By the 22nd July the water was subsiding, and the plains were uncovered by the 28th of August. The effluvia and noxious exhalations which emanated from decaying vegetation for weeks deterred some from returning to their wonted recreations, but many who ventured to revisit the plains and low grounds, contrary to what might be expected, did not suffer in health from malaria. It is worthy of remark, however, that although intermittent fever and other diseases resulting from malaria were less frequent among foreigners than during the previous summer and autumn, natives suffered more from them than usual.

Although the maximum thermometer registered 97° in the shade, the same as in the previous summer, and the last summer gives higher readings for the maximum thermometer throughout, yet it was the common experience that last summer was here more moderate, and passed more rapidly away than the preceding one. This is to be accounted for by the late advent of really hot weather, and the frequent breaks which re-animated this community. In the end of May, the maximum thermometer registered 90° on two occasions, and the weather was unusually hot for about a week. With the rains of June we had a comparatively low thermometer for that month, so that the really trying weather did not commence until the first week of July. A burst on the 8th, another on the 21st, and another or the 26th, rendered that month bearable. The beginning of August was ushered in with hot and oppressive weather, but the breezes from the mountains behind the city sufficed to prevent any one suffering badly from its effects. The burst which occurred on the 18th August, when a severe N.N.W. gale blew for over twelve hours, terminated the oppressive weather. No cases of sunstroke have occurred here of which I have heard.

H. M. S. *Hornet* has been in port since the beginning of January, 1876. The officers and men number 78, and during these three months, they have been exceptionally healthy. Frequently Dr. Sandys, the medical officer on board, has been able to show a clean sick-list.

D.—Dr. B. S. RINGER's Report on the Health of Tamsui and Kelung for the year ended 30th September, 1875.

DURING the heat of the summer a few cases of rather severe diarrhœa, attended with occasional vomiting and febrile disturbance, occurred at the tea settlement, Twatutia. I am inclined to believe the cause was malarious, as the neighbourhood is surrounded by swampy paddy fields and vegetable gardens that are watered with liquefied human excrement, and in no case was the attack traceable to any indiscretion in diet; however, in a week or two, under ordinary treatment and a change for a day or two at the sea-side, each case terminated favourably.

In Kelung one or two cases of ague have to be noted; they may probably be accounted for by the dampness of the climate and the fact that the foreign residences are for the most part built at the foot of a steep hill.

No fatal cases have to be recorded.

DISEASE AMONGST CHINESE.

At the commencement of this year the Rev. Dr. FRASER was sent by the Presbyterian Church of Canada as Medical Missionary for North Formosa, together with whom I have continued to see Chinese patients at the Tamsui Mission Hospital, where we have to a certain extent divided the work:—

During the year 1875, 1,489 new patients have attended, and the following list will show the principal diseases from which they suffered:—

Diseases of Eye,	265	Rheumatism,	96
Diseases of Alimentary canal,	149	Ulcers,	89
Diseases of Respiratory organs,	149	Abscesses,	50
Debility,	132	Opium smoking,	23
Diseases of Skin,	111	Toothache,	23
Venereal diseases and seminal debility,	106	Fistula and Piles,	15

With mixed cases of surgical injuries, glandular enlargements, and diseases of the nervous system.

A fair number of operations have been performed, of which the two following, being of some interest, are reported in detail:—

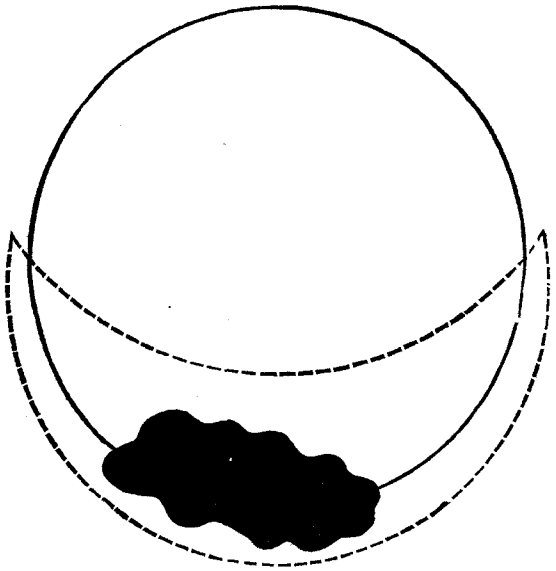
Case 1.—KIAM, female, æt. 56, presented herself at the hospital suffering from a cancerous growth as large as a medium sized orange, extending from the lobe of the right ear downwards in front of the angle of the jaw into the cheek, and discharging a most foul-smelling secretion; the patient complained of much pain and discomfort from the presence of the tumour, and was anxious to have it removed. Careful examination showed it to be moveable over the jaw and not attached to the bone; some of the glands in the neighbourhood were enlarged.

On April 26th, the patient was put under the influence of chloroform and the tumour excised, the edges of the skin were approximated with silver wire sutures, but the wound was too wide to admit of their meeting by more than an inch; the tissues, however, appeared healthy, and the surface was covered with lint soaked in carbolic acid and oil, the patient was given a tonic of

iron, quinine and strychnine, and nourishing diet with port wine. On May 1st, healthy granulations began to appear; on the 6th, the oil dressing was changed for a weak lotion of carbolic acid, which was continued until the 4th August, during which time the healing process had progressed slowly but favourably, the whole wound, with the exception of a small spot about the size of a five-cent piece, having firmly cicatrized.

The patient now returned to her home, taking with her some zinc ointment to apply to the sore; in a week she again presented herself with nothing but a small fistulous passage remaining, which appeared to lead into the parotid duct, as every time the patient carried on the act of mastication, drops of saliva gradually fell from the small opening. A probe dipped in carbolic acid was passed into it, and after two or three repetitions the opening completely closed, and the patient returned to her home in much better health and spirits than when she first presented herself at the hospital.

Case 2.—KHIN, labourer, æt. 56, had had, as long as he could remember, a cystic tumour beneath the scalp at the posterior portion of the left temporal bone; for the last few months he had noticed a small growth at the base of the cyst, which gradually increased in size, whereupon he came to the hospital for advice on December 9th, 1875. On examination, a doughy mass about the size of a turkey's egg was felt beneath the scalp in the position mentioned above; at the base of this, and growing from the skin, was a cancerous sprout as large as half a walnut, emitting a most offensive odour and discharge. On the 11th December, the cyst and cancerous deposit were both removed by the following operation:—Two elliptical incisions were made through the scalp down to the periosteum, including the cancer between them, which, with the skin, was removed; the cyst was then dissected out, and the loose flap of skin which covered it drawn downwards so as to fill up the gap left by the removal of the cancer; the parts were secured in position by silver sutures. Considerable arterial hemorrhage took place during the operation, and the posterior temporal was ligatured. The following diagram may serve to better illustrate the steps of the operation:—



The broken lines represent the incisions; the dark area represents the cancerous growth.

After adjusting the flap the length of the incision was 6½ inches; the oozing was arrested by a pad of lint, and a dose of opium was administered to the patient, who had submitted to the operation without chloroform. The cyst wall was of considerable thickness and contained a whitish coloured cheesy mass which showed under the microscope numerous crystals of cholesterine mixed with granular matter; there were also many hairs, some long and with roots, others about ¼ of an inch in length and having the appearance of the short pieces removed from the scalp in the periodical acts of shaving. The cancerous growth seemed to have no connection whatever with the cystic tumour.

On the third day from the operation, some heat, redness and effusion appeared, a suture at the lower part was removed, and about two drachms of sero-purulent liquid escaped; a poultice was then applied, and in a day or two the inflammation subsided and a compress of lint was placed over the wound.

On the eighth day all the sutures were removed, considerable union had taken place in the upper part of the wound, which, however, still discharged freely; the rest of the treatment consisted in the daily cleansing of the part with carbolic acid lotion, and the application of a pad of lint; in three weeks' time the patient was discharged cured.

More than two months after the operation the patient was again seen, and the cicatrix was then firm and about ⅛th of an inch in width; it is worthy of note that the hair on that part of the scalp which formerly covered the cyst had become very scanty, whilst that on the surrounding part was thick and strong.

Thinking it may not be without interest to some who will read this report, I take this opportunity of mentioning that during the summer months a very severe murrain took place amongst the swine in and for miles around this port; they absolutely died by hundreds, causing considerable distress amongst breeders.

I took the opportunity of examining some of them, and found the cause of death to have been probably of a typhoid nature, the lower intestines being highly inflamed and studded with numerous ulcerations, some of which had very nearly perforated the intestinal coats; the animals were said to lose their appetites and sometimes to vomit before death, but as a rule to die quietly and quickly.

Since making these observations I have seen an extract from a veterinary paper, in which it mentions that an epidemic amongst pigs of a typhoid nature has been not unfrequently noticed in Ireland, causing much destruction among the herds. At the time of the disease I heard, and have good reason to believe, that the Chinese consumed as food many of the dead animals, though I never heard of any injurious effects resulting therefrom.

During the latter months of the year, a similar epidemic took place amongst the poultry, and not alone those allowed to find their own food on the banks of the river, but also those carefully fed in foreign yards, in one of which no less than between 30 and 40 died in a few weeks. I examined several, and in one case found the intestines ulcerated, in the others the cause of death was not discovered. In the course of a month or two the disease seemed to die out, and health was again restored to the inmates of the farm-yards.

E.—Dr. T. RENNIE's Report on the Health of Takow and Taiwan-fu for the six months ended 31st March, 1876.

THE health of the foreign community was not so good as in past winters. There were no fewer than five of the community who suffered from repeated attacks of simple intermittent fever. Four out of the five cases had their origin in a locality which has for some time been admitted to be decidedly malarious, and out of which situation it is very seldom that among the Europeans a case of malarious fever appears.

Of those affected with fever, two, beyond the anxiety of the disease while it lasted, had no further suffering, a third was rendered very anæmic, and a fourth, who had formerly suffered from ague and enlarged spleen, had on the present occasion much turgescence of both liver and spleen, on the legs irritable ulcers formed which were with difficulty healed, and when healed, broke out with a fresh attack of fever.

The fifth subject of ague arrived in Takow in the month of November. He was then in a weak state of health, and from the front of the tibia a piece of necrosed bone was in process of separation. Soon after his arrival he had an attack of ague, which was followed by much debility, congestion of liver, and great mental and physical depression.

Among the foreign community there was one death from traumatic delirium. The subject had resided about fourteen years in warm climates, and had long been addicted to alcoholic excesses. After a period of free drinking alcoholism set in, and while in this state, by a fall, simple oblique fracture of the right thigh bone was produced. Almost immediately after the accident delirium commenced, and in ten days terminated fatally by coma.

Among the shipping there was an unusually large number of venereal cases, and one case of modified small-pox occured in port.

Table of Maximum, Minimum and Mean Temperatures in the shade for each month:—

DATE.	MAXIMUM.	MINIMUM.	MEAN.
1875.			
October,	86°	73°	81°
November,	82°	68°	76°
December,	77°	57°	66°
1876.			
January,	77°	42°	60°
February,	74°	48°	66°
March,	84°	60°	76°

As a rule, during the winter half of the year no rain falls; but this year rain fell on several days of each month.

The following is a list of the diseases of natives treated at the Takow Chinese Hospital during the past six months:—

A.—General Diseases.

Intermittent Fever,	165	cases.
Remittent Fever,	147	„
Simple Cholera,	6	„
Influenza,	15	„
Erysipelas,	3	„
Acute Rheumatism,	2	„
Gonorrhœal Rheumatism,	6	„
Chronic Rheumatism,	33	„
Synovial Rheumatism,	2	„
Primary Syphilis,	35	„
Secondary Syphilis,	63	„
Hereditary Syphilis,	6	„
Encephaloid Fungus of Eye,	1	„
Leprosy,	5	„
Scrofula,	2	„
Debility,	30	„
Anæmia,	50	„
General Dropsy,	12	„

B.—Local Diseases.

Diseases of the Nervous System:—

Apoplexy,	2	„
Paralysis,	3	„
Epilepsy,	1	„
Hysteria,	3	„
Neuralgia,	6	„

Diseases of the Eye:—

Ophthalmia,	60	„
Gonorrhœal Ophthalmia,	5	„
Pterygium,	5	„
Keratitis,	2	„
Ulcer of Cornea,	30	„
Opacity of Cornea,	13	„
Arcus Senilis,	1	„
Staphyloma,	6	„
Sclerotitis,	2	„
Iritis,	2	„
Amaurosis,	4	„
Cataract,	4	„
Glaucoma,	2	cases.
Hordeolum,	2	„
Entropium,	4	„
Trichiasis,	6	„
Tarsal Ophthalmia,	6	„

Diseases of the Ear:—

Otorrhœa,	3	„
Otitis externa,	2	„

Diseases of the Nose:—

Epistaxis,	2	„
Polypus,	3	„

Diseases of the Circulatory System:—

Valvular disease of Heart,	2	„
Varicose Veins,	4	„

Diseases of the Absorbent System:—

Suppuration of Glands,	4	„
Lymph Scrotum,	2	„

Diseases of the Ductless Glands:—

Goitre,	2	„

Diseases of the Respiratory System:—

Chronic Laryngitis,	2	„
Chronic Bronchitis,	20	„
Asthma,	4	„
Pneumonia,	1	„
Phthisis,	20	„
Pleurisy,	2	„

Diseases of the Digestive System:—

Thrush,	4	„
Carious Teeth,	16	„
Necrosis of Alveolus,	2	„
Gumboil,	2	„
Mercurial Inflammation of Gums,	1	„
Double Hare Lip,	1	„
Ulcerated Throat,	4	„
Quinsy,	2	„
Dyspepsia,	30	„
Dysentery,	7	„
Hernia,	2	„

Lumbrici,	21 cases.
Diarrhœa,	13 „
Constipation,	4 „
Fistula in ano,	7 „
Hæmorrhoids,	7 „
Fissure of the Anus,	1 „
Congestion of Liver,	15 „
Icterus,	4 „
Ague-cake,	76 „
Ascites,	2 „
Diseases of the Urinary System:—	
Bright's disease,	1 „
Cystitis,	1 „
Calculus of the Bladder,	1 „
Gonorrhœa,	12 „
Phimosis,	3 „
Urinary Fistula,	1 „
Diseases of the Generative System:—	
Sloughing of Scrotum,	1 „
Hydrocele,	2 „
Orchitis,	3 „
Leucorrhœa,	6 „
Amenorrhœa,	2 „
Dysmenorrhœa,	2 „
Diseases of the Organs of Locomotion:—	
Periostitis,	2 „
Necrosis,	3 „
Acute Synovitis,	3 „
Abscess,	5 cases.
Caries of Spine,	1 „
Diseases of Cellular Tissue:—	
Abscess,	8 „
Diseases of the Cutaneous System:—	
Urticaria,	1 „
Psoriasis,	2 „
Herpes,	2 „
Eczema,	3 „
Ecthyma,	4 „
Acne,	5 „
Ichthyosis,	2 „
Ulcer,	85 „
Boils,	8 „
Whitlow,	5 „
Gangrene,	3 „
Fatty Tumour,	2 „
Cheloid,	2 „
Scabies,	48 „
Dhobee Itch,	15 „
Local Injuries:—	
Contused wounds,	11 „
Incised wounds,	9 „
Gunshot injuries,	4 „
Fractures,	3 „
Lesions from punishment,	6 „
Opium smoking,	11 „

About the beginning of October, when the country was drying up after the rains, malarious fever assumed an epidemic form, and was more fatal than it had been for many years.

Towards the end of October, inland from Takow an epidemic of simple cholera broke out. This disease cut off many of the weak and sickly, and caused considerable consternation among the natives. Only six cases came under my observation, and of these, two, having come too late for treatment, died.

Small-pox, which is never absent from the island was, at the beginning of the year, very prevalent about Taiwan-fu, but as yet few cases have appeared near Takow.

F.—Dr. J. H. Mackenzie's Report on the Health of Ningpo for 1875-76.

During the year which commenced April 1st, 1875, and ended March 31st, 1876, the accompanying table will show that the health of the foreign community has been very good, only one death having taken place during that period.

Diseases of Respiratory Organs and Air Passages:—		Stricture of Urethra,	2 cases.
Croup,	1 case.	Menorrhagia,	2 „
Catarrh,	3 „	Dysmenorrhœa,	2 „
Ulcers of Larynx,	5 „	*Diseases of Nervous System:—*	
Bronchitis,	1 „	Neuralgia,	2 „
Pneumonia,	1 „	Epilepsy,	2 „
Diseases of Circulatory Organs:—		Apoplexy,	1 „
Valvular disease of Heart,	2 „	*Diseases of Skin:—*	
Diseases of Organs of Digestion:—		Herpes,	3 „
Dyspepsia,	7 „	Urticaria,	4 „
Colic,	2 „	Eczema,	2 „
Worms,	2 „	Scabies,	1 „
Boils,	3 „	*Constitutional Diseases:—*	
Diarrhœa,	25 „	Small-pox,	1 „
Dysentery,	3 „	Intermittent fever,	8 „
Diseases of Hepatic System:—		Febricula,	9 „
Congestion of Liver,	2 „	Syphilis,	3 „
Hæmorrhoids,	2 „	*Wounds, Contusions, &c.:—*	
Diseases of Urinary and Sexual Organs:—		Fracture of Radius,	1 „
Catarrh of Bladder,	1 „	Sprained Ankle,	2 „
Gonorrhœa,	5 „	Palmar Abscess,	1 „
Orchitis,	2 „	*Unclassed in above:—*	
Chancre,	1 „	Lachrymal Fistula,	1 „
		Conjunctivitis,	2 „

As usual the predominating complaints were diarrhœa and dyspepsia, the months of June, July and August having contributed the greatest number of cases of the former disease, the latter being distributed throughout the whole year. In most instances fruit was the cause of diarrhœa; and people cannot be too careful as regards both the quantity and quality of the fruit they consume.

Several cases of severe purging and vomiting came under my notice, caused by eating clams and other shell-fish, and although alarming at the time, were easily managed.

A few cases of dysentery occurred, but only one of them of a serious character. The treatment pursued in all of them was the administration of grey powder and Dover's powder in combination, with an occasional dose of castor oil; and in one case, a nightly injection of twenty-

five or thirty drops of laudanum in an ounce of starch. During convalescence, quinine, iron, and other tonics were freely given. The powders were small and repeated at intervals of every two, three or four hours; and in no case was salivation or any other unpleasant effect produced.

I have to note one case of small-pox, which was severe during the short time it lasted; but I am glad to say the patient made a speedy and complete recovery. Fortunately he was living in a house entirely detached from any other, so that during his sickness and for a time afterwards he was kept quite isolated from the rest of the foreign community.

The only death among foreigners was that of a man from pneumonia. And when we take into consideration that he led a pretty hard life during the "rebel times" in China, and that he afterwards kept a house of public entertainment in Ningpo, which was principally frequented by sailors and that class of men, it is not surprising that his disease ran a very short course.

I have now treated a number of cases of gonorrhœa according to the plan recommended by Dr. BLIGH in the *Practitioner* of February 7th, 1874, and can speak very highly regarding it. He recommends an injection of bromide of potassium, 20 grains to the ounce, to be used three or four times a day, and at the same time administers bromide of potassium, bicarbonate of potash, tincture of hyoscyamus, and camphor water internally. I have employed his treatment in all stages with excellent results.

The case of apoplexy occurred on the 27th March, 1876, and is still under observation.

Eight cases of intermittent fever came under my notice, the tertian form being the most common. One or two cases were rather severe, but quinine effected a cure in all of them.

Of the three cases of syphilis, all were contracted at other ports, two of the patients being seafaring men. Mr. WHEATLEY, our harbour master, has kindly allowed me to look over his meteorological record, from which I have extracted a note of the maximum and minimum temperatures for each month. I also see from the same record, that we had the greatest rain-fall during the months of May, July, August and September of 1875, and January, February and March of 1876. April, October, November and December of 1875 being remarkably dry fine months.

1875.	April, ...	Maximum	81°	Minimum	45°
„	May, ...	„	89°	„	58°
„	June, ...	„	86°	„	68°
„	July, ...	„	98°	„	63°
„	August, ...	„	95°	„	70°
„	September, ...	„	88°	„	66°
„	October, ...	„	77°	„	55°
„	November, ...	„	71°	„	40°
„	December, ...	„	58°	„	24°
1876.	January, ...	„	49°	„	22°
„	February, ...	„	57°	„	36°
„	March, ...	„	72°	„	38°

G.—Dr. Scott's Report on the Health of Swatow for the half year ended 31st March, 1876.

The general health of European residents for the past six months has been good. Although the number of deaths has been unusually large, four in all, in only one case can death be traced to the effects of climate.

Causes of death among Europeans at Swatow:—

Abscess of Liver,	1
Croup,	1
Albuminuria,	1
Puerperal Fever,	1

The European population of this port is about 150; men, women and children. This would give a very high death-rate, but it is quite exceptional, and many years pass without the death of any resident here.

The number of births during the past six months was five, two boys and three girls.

The summer of 1875 was again marked by a very severe epidemic of cholera amongst the Chinese. In the city of Chaichow-fu, I was told by a French priest that the people were dying at the rate of sixty a day, and this lasting for some months.

A few cases came under my notice amongst the European sailors in harbour, in which I tried the hypodermic injection of chloral hydrate, but without any good results. I however found the chloral hydrate by mouth very useful in the spasmodic stage of the disease.

All the sailors who suffered from cholera had been on shore in the Chinese town, eating and drinking. In one ship three men were attacked, and these were the only sailors in this ship who were known to have been on shore, showing, I think, that they had contracted the disease in the Chinese town; no doubt from food or drink.

All the foreign residents, with one exception, escaped the disease, and he lived in the Chinese town.

H.—Dr. MANSON's Report on the Health of Amoy for the half year ended 31st March, 1876.

THE following observations of temperature were taken at the Custom House on the Amoy side:—

		HIGHEST.	LOWEST.
1875.	October, ...	91°	62°
	November, ...	84°	57°
	December, ...	74°	44°
1876.	January, ...	68°	41°
	February, ...	69°	51°
	March, ...	74°	47°

The rain-fall was observed on Kulangsu to be as follows:—

1875.		1876.	
October, ...	0·33 inch.	January, ...	1·60 inch.
November, ...	*Nil.*	February, . . .	1·57 „
December, ...	0·17 „	March, ...	9·76 „

The past winter has been a very healthy one. There have been no deaths among the foreign residents. Among sailors there has been one death, in the month of October, from congestive apoplexy. The case was that of a negro, about forty years old, who had not previously complained of bad health. He died suddenly while engaged in mending a sail on the ship's deck. At the *post-mortem* examination nothing was discovered beyond an intense congestion of the vessels of the surface of the brain and of the brain substance.

In last report we noticed the prevalence of choleraic diarrhœa among the Chinese during the months of August and September. Towards the end of September and during the month of October, the disease increased in severity. In October many hundreds of Chinese died. With the cold weather in November the number of cases decreased and became less fatal. By December the disease had entirely disappeared. It was characterised by sudden seizure, vomiting and purging, copious watery stools, cramps and coldness of the extremities. Cases ended in death frequently within twelve hours from the onset of the disease.

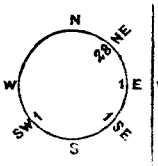
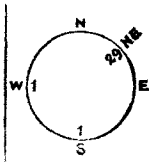
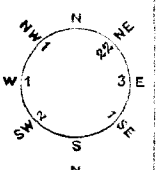
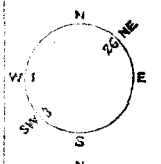
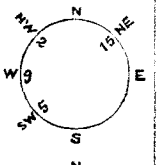
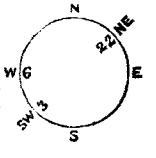
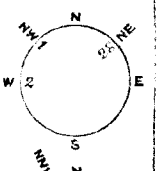
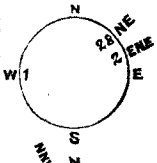
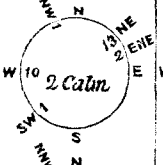
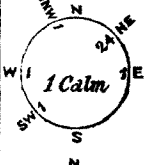
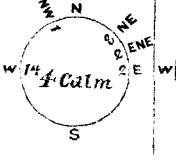
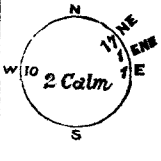
I.—Dr. J. R. Somerville's Report on the Health of Foochow (Pagoda Anchorage) for the half year ended 31st March, 1876.

I.—Meteorology.

I am indebted to the Harbour Master, Captain Rennell, for the following observations taken at the Custom House, Pagoda Anchorage:—

Abstract of Meteorological Observations taken at the Harbour Master's Office, Pagoda Anchorage, Foochow, for the six months ended 31st March, 1876.

Latitude, 25° 58′ 22″ North. Longitude, 119° 27′ 40″ East. Height above the sea, 30 feet.

Date.	Barometer, No. 272.	Self-Registering Thermometer.			Hygrometer.		Rain 24 hours	Wind.			
	Reduced to Thermometer of 32° F.	Solar Radiation No. 77072.	Maximum in Air.	Minimum in Air.	Wet bulb, No. 173.	Dry bulb, No. 172.		Force in lbs per square foot.	Force in lbs per square foot.	Summary of Direction.	
								9.30 A.M.	3.30 P.M.	9.30 A.M.	3.30 P.M.
1875.	Inches.	°	°	°	°	°					
October, ...	Max. 30·103	149·0	83·4	72·0	73·6	80·7	·640	1·435	4·012		
	Mean 29·986	122·8	77·7	66·1	67·2	73·1	·039	·347	·726		
	Min. 29·836	84·0	71·3	55·6	60·4	67·4	·000	·002	·017		
November, ...	Max. 30·355	141·0	77·8	64·8	67·9	75·7	·000	1·211	1·743		
	Mean 30·136	120·0	71·4	58·3	60·3	66·4	·000	·264	·622		
	Min. 29·899	81·0	63·4	51·8	51·1	58·1	·000	·031	·011		
December, ...	Max. 30·432	125·0	70·8	54·8	57·3	67·9	·410	·803	1·837		
	Mean 30·219	103·1	60·0	45·7	47·9	54·4	·023	·160	·316		
	Min. 29·988	69·0	52·0	33·5	32·6	38·5	·000	·005	·003		
1876.								Beaufort's Scale.	Beaufort's Scale.		
January, ...	Max. 30·509	122·0	69·0	53·0	56·0	60·0	1·280	4·0	4·0		
	Mean 30·264	85·1	55·3	44·8	45·6	49·3	·059	1·4	1·8		
	Min. 30·049	58·0	46·0	35·0	34·0	38·0	·000	1·0	1·0		
February, ...	Max. 30·346	134·0	71·0	53·0	56·0	59·0	1·024	3·0	4·0		
	Mean 30·164	85·4	56·5	46·9	48·4	51·2	·076	1·5	2·2		
	Min. 30·017	53·0	48·0	43·0	44·0	46·0	·000	0·0	0·0		
March, ...	Max. 30·242	129·0	76·0	62·0	66·0	69·0	1·075	4·0	4·0		
	Mean 30·025	92·4	61·2	50·0	51·9	54·9	·250	1·3	1·7		
	Min. 29·832	52·0	49·0	43·0	41·0	43·0	·000	0·0	0·0		

The present series completes the observations of the climate of this district for two years, by means of accurate instruments and in standard conditions.

It will be observed that these meteorological returns are in a more condensed form than those formerly published by me in the Reports.

The former table was found to be too elaborate in the absence of any officer specially appointed for the work. While this is to be regretted, as taking from the completeness of the table when seen at a glance, it does not interfere with its value as a scientific record. The columns dew point, elastic force of vapour, and humidity have been omitted, but the materials for computing them are retained, viz., the temperature of the air and the temperature of evaporation as shewn by the dry and wet bulbs respectively. From these data the other conditions can be found at once by means of GLAISHER'S "Hygrometric tables."

The force of the wind is now reckoned by BEAUFORT'S scale, and the anemometer has been discontinued. This is no great loss for, as I showed before, it was found impossible to place the instrument in a position where it would be quite free from local influences. I have suggested that the anemometer be sent to one of the lighthouses (Ockseu, best). In that position it would register the velocity correctly, and the records would be of value, especially those made in a typhoon. The observations are the same, viz., at 9.30 A.M. and at 3.30 P.M.

I purpose now to make a brief analysis of the climate of the six months, comparing it with that of the same period last year; and then to give a condensed summary of the work of the two years.

(*a.*) *Barometer.*—As before, the abstract shows the increase of pressure with the onset of the north-east monsoon, and the diminution towards its close. The maximum is again reached towards the end of December and the beginning of January. The highest reading for the season is 30·509, and the lowest 29·832; the range is therefore ·677. The abstract shows the monthly means; the mean for the six months is found to be 30·132. Last year the mean for the winter months was 30·136. This close approximation shows how regular is the pressure from season to season in this region.

(*b.*) *Thermometer.*—By comparing the maxima and minima daily means, we find the mean temperature of the several months to be as follows:—

1875.		1876.	
October,	71·9°	January,	50·0°
November,	64·8°	February,	51·7°
December,	52·8°	March,	56·6°

The mean temperature for the six months is therefore 57·9°; not quite two degrees lower than that of the same period last year.

The highest temperature in the shade, 83·4°, was reached on the 6th October. Remark—"Fine clear pleasant weather; cirro-cumulus and stratus;" and the lowest, 35·0°, on the 27th January. Remark—"Fine clear weather." The highest range in the shade for the six months is therefore 48·4°, against 56·1° last year.

The highest reading in the sun, 149·0°, is recorded on the 6th October, as was also the highest in the shade; and the lowest in sun, 52·0°, on the 3rd March. Remark—"Threatening appearances of bad weather." The range in the sun for the six months is therefore 97·0°, against 103·8° last year.

From a comparison of the maxima and minima means, we find the mean difference of the day and night temperature to be as follows:—

	1875.		1874.		1876.		1875.
October, . . .	11·6°	against	12·3°	January, . . .	10·5°	against	9·7°
November, .	13·1°	„	15·7°	February, . .	9·6°	„	10·8°
December, . .	14·3°	„	13·8°	March, ...	11·2°	„	14·6°

Mean difference for the six months 11·7°, against 12·8° for the same period last year.

(c.) *Hygrometer.*—The mean difference between the dry and wet bulbs for the six months is found to be:—

	1875.		1874.		1876.		1875.
October, . . .	5·9°	against	4·3°	January, . . .	3·7°	against	3·7°
November, .	6·1°	„	5·4°	February, . .	2·8°	„	3·7°
December, . .	6·5°	„	4·3°	March, ...	3·0°	„	6·7°

Mean difference for the six months 4·6°, which is just the same as last year.

The greatest difference between the bulbs occurred on the afternoon of the 10th December:

Dry Bulb, ...	67·9°
Wet „	54·0°
Difference, ...	13·9°

Remark.—"A.M., Dense haze to 10; cirro-cumulus. P.M., Fine clear dry weather." And the least on the morning of the 7th October—

Dry Bulb, ...	70·4°
Wet „	69·5°
Difference, ...	0·9°

Remark.—"Some light drizzling rain, dense haze to the eastward; cirri in dark masses; overcast." The range for the six months is therefore 13°. For the same period last year, the greatest difference between the bulbs was 14·6° and the least 0·2°, range 14·4°.

Humidity.—From these data I find, by means of one of GLAISHER's hygrometric tables, the humidity of the season to be as follows:—

	1875.		1874.		1876.		1875.
October, . . .	·745	against	·807	January, . . .	·730	against	·755
November, .	·705	„	·652	February, . .	·800	„	·774
December, . .	·628	„	·764	March, ...	·810	„	·762

Mean ·736; against ·752 for last year.

(*d.*) *Rain.*—Rain fell on,—

1875,	5	days in	October,	Amount,	1·209	against	1874,	7	days,	Amount,	3·475
„	0	„	„ November,	„	·000	„	„	2	„	„	·075
„	4	„	„ December,	„	·704	„	„	5	„	„	·780
1876,	5	„	„ January,	„	1·836	„	1875,	10	„	„	2·000
„	15	„	„ February,	„	2·319	„	„	9	„	„	1·092
„	24	„	„ March,	„	7·359	„	„	10	„	„	2·540
Total,	53	„		„	13·427 in.	„		43	„	„	9·962 inches.

It will be seen that November and December were as usual very dry months; so dry that the crops suffered considerably. February had more than the usual rain-fall, and March had only seven dry days. Of the total rain-fall of the six months, March alone scores more than the half.

It is fortunate when the rains come early, as they have this year, for we then escape the discomfort always felt when there is an excess of moisture and a high temperature combined.

(*e.*) *Wind.*—North-easterly winds set in before the middle of September, and the winter monsoon was fully established towards the end of that month.

I have now in these reports made an analysis, based on the observation of accurate instruments, of the climate of this district for the last two years. The analyses were necessarily short, but I hope they included all the chief characteristics of the several seasons.

I would express my sense of obligation to the Customs authorities of the port for having rendered the work at all possible. Any one individual following ordinary avocations could not have made the observations, and it is pleasing to note that not once in the course of the two years has an observation been omitted.

It remains to put the result of the two years' work into a condensed summary, and then to add a few general remarks.

(*a.*) *Barometer.*—

Highest reading during the two years, ...	30·509
Lowest „ „ „ „	29·382
Range, ...	1·127

The mean pressure for the six summer months, viz., from 1st April to 30th September, is 29·786; and for the winter months, from 1st October to 31st March, 30·134; the mean pressure for the two years is therefore 29·960. BUCHAN, in his plates of isobars, makes the line cutting this district for July as between 29·7 and 29·8 (the figures are given only to the first decimal place), and for January 30·2. In the plate showing the mean annual pressure, the isobaric line is marked 30·0.*

It will be seen that these theoretical computations are a very near approximation to the results I have found by actual observation.

* BUCHAN's "Text-book of Meteorology." Edin., 1871. Plates I, II and III.

(b.) *Thermometer.*—

Highest in shade during the two years,	98°
Lowest „ „ „ „	35°
Range,	63°
Highest in sun during the two years,	166·2°
Lowest „ „ „ „	51·4°
Range,	114·8°

The mean temperature is an observation of much importance. For the one year it is found to be 68·8° and for the other 68·3°, a very close approximation. It is more remarkable still that 68·8° is the temperature of the isothermal line which cuts this district according to the projection of DOVÉ, deduced by him from theoretical considerations and published as long ago as 1853.

The mean temperature for the two years is 68.5°.

In Report No. 8, page 55, I remarked: "It is probable that there is a correction to be applied to these monthly means, though it is impossible to tell what. GLAISHER'S corrections apply only to Great Britain, and as for the formula of HERSCHEL, quoted by PARKES as applicable to all parts of the world, in the numerous instances in which I have applied it, the result has always been an *increase* in the mean temperature, instead of, as I presume is intended, a diminution.* Since than I have seen BUCHAN'S "Text-book of Meteorology," where I find the following remarks: "An important use of maximum and minimum temperatures arises from their relation to *mean temperature*, which may be assumed to be the mean of the twenty-four daily observations. I have compared these for a considerable number of places over the globe where such double series of observations have been simultaneously made, and have found that the mean temperature deduced from the mean of maximum and minimum observations is generally about half a degree above the true mean. So uniform, on the whole, is this difference, that it may be accepted as the rule, unless where it is modified by peculiar changes of climate in different seasons and localities."

If we admit the accuracy of this correction and apply it, the mean temperature of the one year will be 68·3°, and of the other 67·8°. The mean temperature for the two years will therefore be 68·0°, which is doubtless very near the truth.

(c.) Hygrometer.—The greatest difference between the dry and wet bulbs during the two years was 17·3°, and the least ·2°; range 17·1°. The mean difference of the bulbs for the summer six months is the same for both seasons, viz., 6·1°, and so is that for the winter months, viz., 4·6°; mean difference for the two years, 5·3°.

Humidity.—The mean for the summer six months is ·759, and for the winter ·744. The mean humidity for the two years is therefore ·751.

This element is a most important one in the formation of climate, so much so that BUCHAN remarks (page 31):—"It may therefore be concluded that the chief disturbing influences at work in the atmosphere are the forces called into play by its aqueous vapour."

* $\frac{2t + t' + t''}{4}$. PARKES'S "Practical Hygiene." 4th Edition, 1873. p. 415.

The humidity here is not excessive as a rule, except in the rainy season; in the winter months it is always low.

(d) Rain-fall.—Rain fell on—

The summer six months of the two seasons respectively:—

72 days.	Amount, . . .	27·627 inches.
62 „	„ . .	27·157 „

Winter months:—

43 days.	Amount, . . .	9·962 inches.
53 „	„ . .	13·427 „

Mean rain-fall for the two years, 57·5 days; amount, 19·543 inches.

This seems a small rain-fall for a place so near the tropics; the cause is the dryness of the winter months, when the north-east monsoon prevails.

The rainy season occurs at the time of the change of the winter to the summer monsoon, viz., part of April, the whole of May, and sometimes the first week of June. There is also some rain at the breaking up of the south-west monsoon in September, but not nearly so much as at the other period. October, November, December and January are generally very dry months.

(e.) Wind.—The north-east monsoon extends over a larger portion of the year than the south-west. It sets in towards the end of September or first week in October, and blows steadily until well into February. In March the winds are variable, but north-east is still the prevailing direction. The same may be said of April. In May the south-west monsoon begins, but the two years' observations show north-east winds to be still the prevailing ones. June and July are the great months of the south-west monsoon. In August and September north-east winds are again seen to be numerically strongest.

With regard to *force*, the greatest velocity recorded during the two years occurred on the 31st October, 1875, viz., 28·33 miles per hour, corresponding to a pressure of 4·012 lbs. on the square foot; but as has been remarked, the anemometer could not be fairly exposed, and this reading is probably too low.

With reference to typhoons, we never at this place experience the full strength of one. We rest on the outer edge of the circle of rotation, and get only the influence that extends beyond it; the closer to the edge of the circle, the greater is the force of the wind.

In my experience here typhoons always come in from some point between N.W. and N.E., and the wind veers N.E., E., S.E., &c. to S.W., and when it comes round to the latter point it falls off. When the direction is E. or S.E. the gusts are very violent.

The above is the rule all along the Chinese seaboard, but when the storm is encountered two or three degrees off the coast, that is, towards the eastward, it is stated by HORSBURGH that "a contrary motion often takes place. Here, as before, ty-foongs generally commence from the northward, but instead of veering to the N.E. and eastward, as in the former case, the wind veers to the N.W. and westward, blowing very severely; it afterwards changes to the S.W. and southward, when it generally abates in violence." *

* HORSBURGH'S "Sailing Directions." 7th Edition, vol. ii., pp. 291-292.

He mentions some very low barometers, especially one case in a typhoon off the coast of Japan, when the mercury fell to 27 inches, and another in the Bashu Channel, 27½ inches. We never have anything like these falls here, but the barometer, when properly watched and taken in connection with the indications of the dry and wet bulb thermometers, always shows the approach of a typhoon, and no other sign can be relied on. Captain BEDFORD, R.N., in a foot-note ("Sailor's Pocket Book," p. 79) says: "The Chinese boatmen of Hongkong frequently predict the approach of a typhoon twenty-four hours before the commencement; they are seldom in error." I am sorry I cannot say as much for the intelligence of the natives in this district. They are always predicting typhoons during the season, but the storm does not follow the prophecy once out of ten times. Captain BEDFORD adds immediately afterwards: "The best and surest of all warnings will, however, be found in the barometer, which, within the tropics varies so slightly under ordinary circumstances, that any fall greater than ·35 in. is a sure sign of an atmospheric disturbance; but in more temperate latitudes, where the barometer varies considerably with no apparent atmospheric change, the indications are less certain." This entirely agrees with my experience here, though the latitude places Foochow a little beyond the tropics.

It is easy enough in this harbour to foretell the coming of a typhoon soon enough to give time for the upper spars to be taken down from aloft, and vessels and houses made sung against the blow; but a correct prediction can only be made by the study of instruments, and not by the observation of "weather signs."

I have mentioned that the difference between the dry and wet bulbs should be taken into account along with the indications of the barometer in predicting a typhoon, and this point is particularly valuable in distinguishing a N.E. gale from the latter, at the onset of the winter monsoon. The barometer falls at first in either case, but in the event of a N.E. gale, the evaporation increases rapidly with the wind, whereas in a revolving storm it does not, or only to a slight degree. In a burst from the N.E., the glass, though it falls at first, soon rises; in a typhoon it continues to fall, as a rule, until the wind has veered to a point between E. and S.

It is easy to explain these differences according to well established meteorological principles, but space does not allow of it at present.

The above facts with regard to the direction and veering of the wind during the passage of revolving storms in this neighbourhood may be relied on; they are, however, meagre enough, and the matter is in need of systematic investigation. The subject of the cyclones of the Indian Ocean has been worked out lately in a beautifully complete manner by Mr. MELDRUM at Mauritius, and there is nothing to prevent the same being done for China. This port would not answer; it is up a tidal river, and the configuration of the land gives rise to local influences. The work could be carried out at a place on the sea coast, such as Amoy or Hongkong. Here, Ockseu lighthouse would be the best station.

BUCHAN, in mentioning MELDRUM'S investigations in Mauritius, says: "Mr. MELDRUM worked at the solution of this problem for several years, and took a very effective course to test the justness of his conclusions. He laid down the path of the storm from the Mauritius observations alone, and on afterwards receiving from captains of vessels who had encountered the storm a note of the latitudes and longitudes, stated, to their surprise, when and where they had the storm, and the direction and veerings of the wind during its continuance. After sufficient

experience had been acquired, a note was sent to the daily newspapers when it was concluded from the Mauritius observations that a storm was abroad, stating its position and probable course from day to day. These notifications were carefully compared with the logs of ships which afterwards touched at the island. No case of failure has occurred since these notices began to be sent to the daily press. This gratifying result is of great value, since it shows what may be done at an isolated station on the ocean, or what may be done in ships at sea." *

II.—General Remarks on the Climate of the two years, and its connection with Health and Disease.

The observations show that the year may be divided into three seasons, viz., the periods of the winter monsoon, the rainy season, and the summer monsoon. Although these seasons gradually merge one into another, each is distinguished by well marked meteorological characteristics. The time between the end of the winter and the beginning of the summer monsoons, and *vice versâ*, is called the "breaking up of the monsoons." In the first case this period corresponds to the great rainy season, and in the second it is marked by the prevalence of easterly and northerly winds before the advent of the north-east monsoon, and sometimes by revolving storms.

The period of the north-east monsoon, which extends from the end of September or beginning of October to the end of March or middle of April, is characterized by a moderate day and night temperature, a low degree of humidity and a small rain-fall. These elements unite to form a delightfully cool bracing climate, grateful alike to the healthy and to the sick.

The rainy season, viz., the latter half of April, the whole of May, and sometimes the first week of June, is distinguished by a rather high temperature, a high degree of humidity, little wind, and a large rain-fall. This period, as I have already shown, is the most unpleasant of the year, evaporation from the skin being at a minimum because of the humidity of the air and the absence of wind.

The period of the south-west monsoon, from the beginning of June to the middle of September, is characterized by a high day temperature, often a high night temperature, a degree of humidity that is not excessive, though much greater than that of the winter monsoon, and a moderate rain-fall.

After the middle of August, the winds are often from N. or E. or points between these, and when this is the case the heat is much moderated and the humidity lessened.

With reference to these seasons and health and disease, the ailments experienced in the rainy season and south-west monsoon are diarrhœa, dysentery, and the various forms of "heat malaise" to which I referred at large in last report; and these are undoubtedly climatic. I have already shown that these diseases are not attended with a high mortality.

I have had occasion to remark more than once on the infrequency of what are called "malarious diseases" at the port, even during the hot season. They can hardly be said to occur

* "Text-book of Meteorology," pp. 200-201.

at all during the winter months. (I speak always of foreign practice only.) Besides the configuration of the land and the nature of the sub-soil, the moderated humidity of the air is no doubt to a great extent the cause of this immunity from intermittents and remittents, for as PARKES states:* "The spread of certain diseases is supposed to be intimately related to humidity of the air. Malarious diseases, it is said, never attain their fullest epidemic spread unless the humidity approaches to saturation."

Zymotic diseases, so fatal at home, have hardly an existence here, with the exception of typhoid fever, which appears in sporadic cases now and again. Cases of illness during average summers are very numerous, especially intestinal catarrh and heat malaise, but as has been seen, the mortality is small and the diseases disappear when the winter monsoon sets in.

Of the deaths that have occurred during the last fourteen years, most have been caused by dysentery. The fatal cases have been mostly imported, and the disease had gone on to inflammation and ulceration of the large intestine. Death usually takes place from hæmorrhage by ulceration through the coats of a vessel somewhere between the cæcum and the lower part of the rectum.

A case of dysentery when seen early is generally, in my experience, easily cured by means of ipecacuanha and a milk diet, but cases of the chronic form of the disease, when ulceration has occurred, are most unsatisfactory to treat by any method. I have known a sea voyage to England to cure one very bad instance of this kind when all other means had failed, and from all I have seen and learned of chronic dysentery I feel justified in stating that a sea voyage gives the patient the best chance of recovery.

With regard to the winter monsoon, I cannot charge that period with any diseases that can be referred to climate. Cases happening at that season are what may be called "accidental;" at all events, no connection can be made out between their occurrence and unfavourable climatic conditions. On the contrary, the climate of the winter months is conducive to robust health, and consequently to physical and mental enjoyment. "It is impossible to express the feeling of exhilaration experienced on the advent of the north-east monsoon. The languor and irritability of summer disappear, and are succeeded by a sense of buoyancy and cheerfulness that soon makes one forget the discomforts of the hot months." (Report No. 9, p. 50.)

In conclusion, I do not know of any more striking example of the intimate connection that exists between states of body and mind and surrounding physical circumstances than is afforded by a study of these seasons and their relations. This was also the experience of the "Father of Medicine," expressed more than two thousand two hundred years ago. HIPPOCRATES, if not the first of all writers on medicine, may be said at least to have been the first who made the relation of climate to diseases a special study. In his dissertation on "Airs, Waters and Places," the subject is too elaborately treated to admit of quotation without spoiling the whole; but the following, from the "Aphorisms," is in point, as it describes the effects of a climate resembling our own in several particulars:—"17. With regard to the states of the weather which continue but for a day, that which is northerly braces the body, giving it tone, agility and colour, improves the sense of hearing, dries up the bowels, pinches the eyes, and aggravates any previous pain which may have been seated in the chest. But the southerly relaxes the body, and renders it humid, brings

* "Practical Hygiene," 4th Edition, p. 405.

on dulness of hearing, heaviness of the head and vertigo, impairs the movement of the eyes, and renders the alvine discharge watery." *

Five centuries afterwards, CELSUS expresses himself thus: "Therefore spring is most wholesome; then next after that winter; summer is more dangerous; autumn by far the most dangerous. But of the weathers, the steady are the best, whether cold or hot; those which vary most are the worst. Whence it happens that autumn overcomes very many. For generally there is heat at noon-time, cold at night and morning times, and also in the evening. Therefore the body being relaxed, both by summer and sometimes by mid-day heats, is seized suddenly with cold. But as that happens chiefly at that time, so whenever it happens it is injurious. But when there is equality the clear days are the most healthy, the rainy better than only misty or cloudy, and in winter the best are those which are free from all wind; in summer in which west wind blows. If there is another kind of winds, the northern are more wholesome than eastern or south winds. However, these things are so that they may be changed sometimes by the state of countries." (Lib. II.)

Had the same earnest study of the bearings of meteorological conditions on disease pursued by these ancient writers been followed by physicians down to our days, there is little doubt that we should now know more than we do of the causes of disease in general, and of epidemics in particular.

III.—DISEASES.

As is usual during the winter months, cases of illness here are few, and the field of return small. The following may, however, prove interesting:—

Rheumatic fever and Endocarditis.—Monsieur * * * arrived from Formosa in January, to place himself under my care. I take the following from my notes.—

January 17th.—When first seen patient was in so distressed a condition that no minute examination was possible.

January 18th.—A little easier. Found on examination the following: Bruit accompanying first heart sound, heard over most of left side of chest in front, most audible between fourth and fifth ribs about three inches to the left of medium line, just to the left of nipple. Bronchial breathing all over both lungs, and fine dry crepitation at base of left lung. Short cough and much dyspnœa. Expectoration muco-purulent. Anasarca of both legs. Temperature, 101°; pulse, 110; respirations, 30. Abdomen rather hard; cannot detect any fluctuation. Liver enlarged, extending to line of right nipple, and below margin of lower ribs. Left knee-joint swollen and painful. Attack apparently commenced with articular rheumatism on the 24th December, at Tai-wan. Respiration seems to have begun to be affected on the 26th or 27th. On these days, too, the anasarca of the limbs was first observed. Yesterday the heart beats were much more

* "The Genuine Works of Hippocrates." By FRANCIS ADAMS, LL.D., Surgeon. Printed for the Sydenham Society. London, 1849. Vol. II., pp. 718, 719.

tumultuous and the blowing murmur more marked; the dyspnœa was also greater. The difference may perhaps be accounted for by the fact that I immediately put patient on 15-minim doses of the tincture of digitalis every three hours.

January 19th.—Consultation with Dr. OSGOOD. He confirmed my diagnosis and treatment, and suggested bromide of potassium at night,—20-grain doses every two hours,—if patient is restless, as he usually is at night. Last night he was easy after a draught of morphia hydrochlorate (25 min. P. B.); but I agree with Dr. OSGOOD that if the bromide gives the same rest it is to be preferred to morphia. Pulse increased in volume to-day; temperature and other symptoms much the same. Continue the digitalis.

Note.—Anasarca much less to-day. Urine normal; contains no albumen. Both knee-joints swollen and painful.

January 20th.—Pulse 80, intermittent. Reduced the dose of digitalis; he is now taking ten minims every three hours. Evening—patient much improved. Blowing murmur nearly disappeared; pulse good. Has slept well, and taken food with appetite; feels stronger. The fine crepitation, however, is now observed up to left nipple line; none present in right lung.

January 21st.—Crepitation more marked in left lung than yesterday. Since midnight patient has been troubled with cough and tenacious mucus in the air passages. Expectoration scanty and muco-purulent, pale yellow in colour. No rusty sputa. Patient taking a fair amount of nourishment and wine. Anasarca altogether disappeared. Knee-joints better, no pain. Evening—condition much the same; temperature, 100°.

January 22nd.—Patient fidgety and complaining about most things. Cough and expectoration less. Had a good night; pulse 108. Think the lung mischief is merely dilatation of the capillaries from the valvular insufficiency, and not pneumonia. Put him again on a large dose of digitalis (20 minims every three hours). The bromide to be taken at night.

January 23rd.—Patient rather weak; has not been taking food well to-day; objects to most things, and is fidgety. Pulse, 62; temperature, 98·8°. Crepitation in left lung nearly gone. Heart sounds now normal, except that the first sound is hard and rough; no blowing murmur can be detected.

January 24th.—Very weak; pulse 70, and intermittent. Stopped the digitalis and bromide, and put patient on perchloride of iron, with calumba and a draught of morphia at night. Evening—Much worse; delirium and partial coma. Pulse, 70, intermittent; patient apparently sinking. Put him on strong broth and champagne alternately, every hour and a half.

January 25th.—Considerably relieved; slept well after 2 A.M. Pulse 104, stronger and not so intermittent; temperature, 100°. Continue champagne, soup and milk, and the iron mixture.

January 26th.—Feels much better, but is weak. Had a good night; slept well. Pulse 104, stronger. Evening—Feels better than he has done yet; temperature, 98·4°. To-day he is cheerful for the first time. From this date patient continued gradually to improve.

On examining his liver on 3rd February, it was found to have considerably diminished in size, the hepatic dulness extending only to within an inch and a half of the nipple line, instead of being parallel to it, as was the case when first seen. The blowing murmur has completely disappeared, and the only indication left of heart mischief is a slight roughness accompanying

the first sound. Patient left the port in good health, but I ordered him a year's furlough in France as he had been many years in China without a change, and he went home the following month.

Remarks.—It seems certain now that this was a case of endocarditis, the result of acute rheumatism; but as the patient had no history from his medical attendant in Formosa, and as the least motion in the necessary examinations gave rise to the greatest distress, it was impossible to be sure of the nature of the disease for the first forty-eight hours. It seems clear also that the stimulant treatment by means of champagne, broth, &c., given at short intervals, saved the patient by enabling him to tide over the crisis of the disease. I note also from this case the remarkable power of digitalis as a regulator of the heart's action. By increasing or decreasing the dose one was able to get almost at will the wished for character of action.

The Customs staff has not been so fortunate as usual in the matter of health. The sickness has been mostly among the lightkeepers. One man came in from the Middle Dog Lighthouse in March suffering from acute bronchitis and bronchial asthma. He has gone through a severe illness, and it is only to-day (May 26th) that I have been able to report him fit for duty.

In this case moist and sibilant rales existed all over the chest, and for some time it was impossible to ascertain the exact condition of the lungs by means of the stethoscope. Presently they cleared a little, and moist crepitation was observed at base of both lungs, below the lower angle of the scapula, most marked on the right side. There was dulness below this line on both sides. Under treatment by inhalation of the vapour of turpentine, by tonics in the form of iron and quinine, &c., and afterwards by cod liver oil, the crepitation became finer in character, and the cough, dyspnœa and expectoration diminished.

My last examination showed a little consolidation at base of both lungs, especially marked on the right side, but no other morbid sign. The cough and expectoration have ceased, and the patient has recovered the flesh he lost during the illness. This case was attended at first by a high temperature, and afterwards by great changes. I took advantage of these circumstances to make some experiments on the difference between the temperature in the mouth and that in the axilla.

The thermometer used—a self-adjusting one by MAW, SONS, and THOMPSON—was first compared with a standard by placing both instruments in a vessel of warm water, and observing their indications at different temperatures. By this test the thermometer was found to be practically correct. The time of exposure in mouth and axilla was five minutes, as I found by preliminary experiments that the maximum was always reached within that period. After thirty-three observations, the first thermometer got broken, and the standard was then used, which after having recorded thirty-six more, was also unfortunately smashed. The third thermometer I could not depend upon as accurate, and I have therefore not recorded here the observations made by it.

A COMPARISON of the Temperature taken in the Mouth with that taken in the Axilla in a case of Acute Bronchitis.

DATE.	TIME.	MOUTH.	AXILLA.	DIFF.	TIME.	MOUTH.	AXILLA.	DIFF.	REMARKS.
1876.		°	°			°	°		
March 14	9.30 A.M.	103·2	102·8	·4	3.30 P.M.	103·2	102·6	·6	
„ 15	„	99	98·4	·6	„	105	105·2	·2	P.M. axilla higher.
„ 16	„	102·8	102	·8	„	103·8	103·2	·6	
„ 17	„	102	102·4	·4	„	104·4	104	·4	A.M. axilla higher.
„ 18	„	104·2	103·8	·4	„	104·6	104	·6	
„ 19	„	101	100·6	·4	„	103·4	103	·4	
„ 20	„	101·2	101	·2	„	105·2	105·4	·2	P.M. axilla higher.*
„ 21	„	99·2	99·4	·2	„	104	104	·0	A.M. axilla higher.
„ 22	„	99·6	100·2	·6	„	103	102·4	·6	„ „
„ 23	„	102·6	102·4	·2	„	100·4	101	·6	P.M. axilla higher.
„ 24	„	99·8	99·8	·0	„	103	102·2	·8	
„ 25	„	98·8	98·4	·4	„	102·6	102·2	·4	
„ 26	„	99·6	98·6	1·0	„	102·6	102·2	·4	
„ 27	„	99	98	1·0	„	104	103·4	·6	
„ 28	„	105	104·2	·8	„	99	98·6	·4	
„ 29	„	104·4	103	·6	„	101·4	100·6	·8	
„ 30	„	103·2	102·6	·6	„	100	...	...	
Here the first thermometer unfortunately got broken. Second thermometer (the standard one with which the first was compared).									
„ 31	„	...	...	...	„	102·4	102	·4	
April 1	„	103·6	102·8	·8	„	101	100·2	·8	
„ 2	„	105·2	104	1·2	„	100·6	99·4	1·2	
„ 3	„	100·4	99	1·4	„	101·6	101	·6	
„ 4	„	101	100·2	·8	„	101·4	100·2	1·2	
„ 5	„	103	102·4	·6	„	101·2	100	1·2	
„ 6	„	99·8	98·6	1·2	„	101	100	1·0	
„ 7	„	99·6	99	·6	„	100·4	100	·4	
„ 8	„	100·8	100·2	·6	„	100·2	99·8	·4	
„ 9	„	99·2	98·4	·8	„	100·6	100	·6	
„ 10	„	99·2	98·8	·4	„	100·2	99·8	·4	
„ 11	„	99	98·2	·8	„	100	99·6	·4	
„ 12	„	98·6	98	·6	„	99·6	98·8	·8	
„ 13	„	99	98	1·0	„	99·8	99·2	·6	
„ 14	„	99·6	98·8	·8	„	100·4	100	·4	
„ 15	„	99·4	99	·4	„	100·4	100	·4	
„ 16	„	100	99·8	·2	„	99·8	99·2	·6	
„ 17	„	99·8	99·4	·4	„	99·6	99	·6	
„ 18	„	99	98·6	·4	„	99·4	99	·4	†

* Took again the temperature on the 20th at 7.30 P.M. and again found it higher in axilla, viz., mouth, 104·2°; axilla, 104·4°.

† Here the second thermometer was smashed.

Thus it follows that out of sixty-nine observations, in sixty-three the temperature of the mouth was higher, and in six the reverse was the case. This is such a disproportion, that I think we may conclude the exceptions arose from some error of observation. In one case (not recorded in this series) the patient took a drink of water while the thermometer was in his mouth, and the result was a difference of one degree in favour of the axilla. It will be noticed that when the standard instrument was used, the mouth was always higher than the axilla.

Taking the mean of the differences, these experiments show a little over ·5 as the temperature in mouth over that in axilla. The fact that there is difference should always be taken into account in reading temperatures.

Captain RENNELL has reported to me two other cases of sickness in the Customs staff—one scurvy and the other boils and general ill-health. I have not as yet seen these patients, but from inquiries made by Captain RENNELL and myself, there can be no doubt that the one is true scurvy and the other a kindred form of disease induced by mal-nutrition.

No fact in medicine is better established than that scurvy is entirely a preventable disease, and I feel sure that I need only mention these cases to cause inquiry to be made with a view of preventing the occurrence of similar ones in future.

The lighthouses in this district are three in number—Middle Dog, Turnabout and Ockseu. On the Middle Dog vegetables are grown, and there is free communication with the mainland by means of pilot boats, &c. At Turnabout, which is five miles from the mainland, communication is less frequent, but fresh vegetables can sometimes be got. Ockseu is simply a barren rock, on which grows no green thing. The two men, the subjects of the illness just mentioned, have remained on Ockseu, the one for two years and the other for twenty months, without any change to the mainland. Even in these circumstances, I believe that the men need not have become the victims of scurvy had they taken care to have tinned meats and vegetables always on hand, to use when others were not to be had; but it is always difficult to impress on people the benefit of preventive medicine, and besides, tinned articles are expensive in China. I have reason to know, too, that occasionally a man may be found who would stay out from choice, from a mistaken idea of economy.

For a lightkeeper in the service of the British Government, the rule, so far as is compatible with requirements, is that the employé is to spend one month out of six inside. This seems a liberal arrangement, and considering the matter in a purely medical point of view, I should say that if some such regulation were applied here, no man's health need suffer, even when stationed on places where the communication with the mainland is least easy. This rule would oblige every lightkeeper to come in at certain times to have his body renovated with wholesome food, and his mind cheered by contact with his fellows.

IV.—DISEASE IN LIVE STOCK.

Some rumours reached me this winter, circulated by the Chinese, of extensive disease among domestic animals, especially oxen and pigs. It was said they were dying in numbers, and that the flesh of the diseased animals was exposed for sale.

I have inquired in all possible ways into the truth of these rumours, and the following notes embrace the result of the reliable evidence obtained. It is very difficult to get from the native owners of cattle any information with regard to disease on which one can depend. They immediately conclude that the inquirer has some object rather than that of pure science for his researches, and in accordance with the national character they then try to deceive.

The following is obtained through the kindness of a friend from independent native authority, and is, I think, free alike from exaggeration and intentional falsehood:—

During the second and third moons of the present year (March and part of April), a fatal disease prevailed among oxen and pigs, but especially among the former. The animals were noticed to be off their feed, and to look sick; after two or three days, violent purging set in, then intense prostration and collapse followed, and the animal died usually before the fifth day. As

to the prevalence of the disease, I can of course get no reliable statistics, but my informant states, by way of example, that several of his acquaintances lost over ten bullocks in the period mentioned. The disease is always fatal, and the native practitioners freely confess their inability to save an animal so taken. On *post-mortem* examination the liver is found *enlarged* (I was particular about this word in the translation given me), and the bowels are always extensively ulcerated and smell horribly. I cannot find whether it is the large or the small tract of intestines that is affected, or whether both are involved in the degeneration. The disease does not occur every year—for instance, there was none last year—and in some of the seasons when it does exist, there may be only a few isolated cases, and not a general prevalence; or, as we say with reference to man, it is sometimes epidemic and at other times sporadic.

With regard to the quality of the flesh of the diseased animals, my inquiries were rather searching, and with this result. Such meat he knew to be eaten, not only by the very poor natives, but also by those in better circumstances, and, as he expressed it, it might be eaten by anyone "audacious enough" to do it. It was a case of free choice (taste, as we would say) and "audacity." At first sight it seems incredible that anyone not actually starving would knowingly eat of the flesh of animals dying of disease, but as will appear presently, the same thing has been done in our own country not many years ago.

The disease and its attendant liver complications are, I am told, expressed thus:—

爛腸發瀉, Lan ch'ong fa hsiè; 肝壞, kan hwae.

It seems likely that this epizootic is identical in character with one which decimated the pigs and other animals at Tamsui, Formosa, two years ago. The particulars of that outbreak were kindly given me at the time by Dr. DAVIDSON, of H. M. S. *Kestrel*. The symptoms were much the same, and in all the animals dissected by him and the resident medical practitioner, there was found extensive ulceration and disintegration in the small intestines. In one case there was a hydatid cyst in the liver. They considered the disease to be a malignant form of typhoid fever.

As to the character of the meat supplied this season to the residents and shipping, I made many examinations, and I can only say that I found it to come up to the recognized standard of healthy flesh, and I have no reason to think that any of the diseased meat was put on the foreign market. I did not hesitate to use it myself, and to recommend others to do so. It does not require an expert to distinguish unwholesome from wholesome meat. (I am not speaking of flesh infested by parasites.) The characters of healthy meat are well laid down by Dr. LETHEBY, and anyone can apply them for himself.*

"1st.—It is neither of a pale pink colour nor of a deep purple tint, for the former is a sign of disease, and the latter indicates that the animal has not been slaughtered, but died with the blood in it, or has suffered from acute fever.

" 2nd.—It has a marbled appearance, from the ramifications of little veins of fat among the muscles.

" 3rd.—It should be firm and elastic to the touch, and should scarcely moisten the fingers, bad meat being wet and sodden and flabby, with the fat looking like jelly or wet parchment.

* "Lectures on Food," p. 235.

"4th.—It should have little or no odour, and the odour should not be disagreeable, for diseased meat has a sickly cadaverous smell, and sometimes a smell of physic. This is very discoverable when the meat is chopped up and drenched with warm water.

"5th.—It should not shrink or waste much in cooking.

"6th.—It should not run to water or become very wet on standing for a day or so, but should, on the contrary, be dry on the surface.

"7th.—When dried at a temperature of 212° or thereabouts, it should not lose more than 70 to 74 per cent. of its weight, whereas bad meat will often lose as much as 80 per cent."

It is probable that epizootic diseases prevail to a considerable extent in China, and thus it is just possible (however unpleasant the idea) that the flesh of animals so dying might, in exceptional instances, be placed on the foreign market. In these circumstances it is some consolation to know that it has not been proved, except in rare instances, that the eating of the meat of animals dying from blood diseases has been followed by bad effect. (I exclude, of course, meat infested by parasites such as the cysticercus cellulosæ and trichina spiralis.)

PAVY, in his admirable work on food, makes the following startling statements:—*

"The diseases of live stock in relation to the public supply of meat for alimentary purposes formed the subject of investigation by Professor GAMGEE for the fifth report of the medical officer to the Privy Council, published in 1863. From the evidence before him, Professor GAMGEE, unpleasant as it may sound, arrived at the conclusion that as much as one-fifth of the common meat of the country was then derived from animals killed in a state of disease. It is difficult to obtain complete and precise data on such a point, but whether the estimate be correct or not, it may be taken as showing that a large amount of diseased meat was consumed by the public . . . On the one hand it is stated as an authentic fact that during the prevalence of the cattle-plague, or rinderpest, in England in 1865, large quantities of the meat of animals killed in all stages of the disease were eaten without being followed by any ill-effect. The same absence of ill-effect is also stated to have been observed after the consumption of meat derived from animals affected with anthrax and epidemic pleuro-pneumonia and other virulent contagious diseases. It is even asserted that when the steppe-murrain was prevalent in Bohemia some years ago, the carcases of infected animals that had been killed and buried by order of the Government were dug up and eaten by the poor without injury being sustained."

On the other hand there are instances to the contrary, and Dr. PAVY concludes: "Looking, therefore, at the evidence before us regarding the effects of consuming meat derived from animals suffering from infectious disease, it appears that diametrically opposite results have been observed. It may be concluded that some kind of subtle poison exists, and that this may become neutralized or destroyed by the process of cooking and digestion; but why such an event should occur in some cases and not in others is indeed difficult to understand. Practically, however, seeing that serious consequences may ensue, it is only right to look upon all such meat as unsafe, and unfit for human food."

* "A Treatise on Food and Dietetics." By F. W. PAVY, M.D., F.R.S. London, 1874. pp. 146-148.

K.—Dr. FRAZER'S Report on the Health of Tientsin for the half year ended 31st March, 1876.

THE health of the foreign community was very good during the past half year. No deaths occurred and no serious cases of disease or injury came under observation. The health of the Customs staff, as usual, has been excellent, and no member has been incapacitated from performing his duty on account of ill-health.

List of cases treated during the six months:—

1. *Diseases of the Digestive Organs:*—
   - Dyspepsia, ... 2 cases.
   - Diarrhœa, ... 6 „
   - Colic, ... 1 „
   - Constipation, ... 2 „
2. *Diseases of the Urinary System:*—
   - Stricture, ... 2 „
3. *Miasmatic Diseases:*—
   - Remittent Fever, ... 3 „
   - Diphtheria, ... 1 „
4. *Diseases of the Respiratory System:*—
   - Catarrh, ... 10 „
   - Bronchitis, ... 1 „
5. *Diathetic Diseases:*—
   - Rheumatism, ... 10 „
6. *Parasitic Diseases:*—
   - Tænia Solium, ... 4 cases.
   - Ascaris Lumbricoïdes, . . 10 „
7. *Diseases of the Nervous System:*—
   - Otitis, ... 2 „
   - Sciatica, ... 2 „
   - Neuralgia, ... 8 „
8. *Eye Diseases:*—
   - Ophthalmia, ... 2 „
9. *Accidents:*—
   - Wounds, ... 2 „
   - Fracture, ... 1 „
   - Burn, ... 1 „

Diphtheria.—The case mentioned in the above list was mild and yielded readily to treatment. But a severe form of the disease existed as an epidemic amongst the native community, characterised by high premonitory fever, swelling of the cervical glands, with a tendency to laryngeal exudation and blood poisoning. The death rate, as far as I could learn, was about 25 per cent. of those attacked.

SUMMARY of Meteorological Observations for the half year ended March 31st, 1876.

MONTHS.	BAROMETER.		THERMOMETER.		REMARKS.
	MAX.	MIN.	MAX.	MIN.	
1875.	inches.	inches.			
October,	30·38	29·90	66°	26°	The prevailing winds were N.E. & N.W.
November,	30·58	29·84	61°	18°	
December,	30·64	30·00	40°	8°	
1876.					
January,	30·63	30·04	38°	2°	
February,	30·53	29·92	47°	15°	
March,	30·34	29·82	63°	19°	

L.—Dr. Alexander JAMIESON'S Report on the Health of Shanghai for the half year ended 31st March, 1876.

FOR the following abstract of meteorological observations I am indebted to the kindness of the Rev. Father DECHEVRENS, S.J., Superintendent of the Observatory at Sikawei. The position of the instruments and the conditions under which the observations here summarized are taken, may be ascertained by reference to the account officially published by the Superintendent, or to the last number of these Reports (10) page 53.

ABSTRACT of Meteorological Observations taken at the Observatory of the Jesuit Mission at Sicawei, for the six months ended 31st March, 1876. Latitude, 31° 12′ 30″ N. Longitude E. of Greenwich, $8^h\ 5^m\ 44.63^s$.

DATE.	Barometer at 0° C.	Thermometer: Temperature in Shade, observed at intervals of three hours.	Thermometer: Extreme Temperature in Shade.	Elastic Force of Vapour.	Humidity.	Ozone.	Evaporation during 24 hours.	Rainfall in 24 hours.	Velocity of Wind.	REMARKS.
1875–76.	mm	°C.	°C.	mm of Mercury.	0-100.	0-21.	mm	mm	M. per sec.	
Oct., Max ...	769·03	27·0	29·0	16·19	100·0	20·0	6·90	199·9	9·3	On the 24th, from 11 A.M. to 2.30 P.M. a torrent of rain fell registering 179·8 millim., or an average of 51·4 millim. an hour.
Mean	764·65	17·08	17·90	11·06	77·1	7·0	103·39*	210·2*	2·7	
Min ...	759·51	8·4	7·5	5·96	31·0	0·0	0·61	0·2	0·0	
Range	9·52	18·6	21·5	10·23	69·0	20·0	6·29			
Nov., Max ...	773·54	22·0	23·1	12·36	100·0	21·0	3·90	9·4	8·2	On the 29th, a heavy storm, during which the barometer oscillated over 9 millim. in 24 hours.
Mean	768·07	10·30	10·80	7·36	77·8	7·1	70·04*	18·4*	2·2	
Min ...	758·06	−1·0	−1·8	2·32	31·0	0·0	0·40	0·1	0·0	
Range	15·48	23·0	24·9	10·04	69·0	21·0	3·50			
Dec., Max ...	778·50	17·0	18·0	10·08	100·0	14·0	2·80	9·1	14·7	On the 18th, a heavy gale, which from 1 P.M. to 1.15 A.M. blew at the rate of 18 mètres per second.
Mean	770·08	2·86	3·29	4·55	79·9	6·5	63·26*	21·3*	3·1	
Min ...	762·65	−8·2	−8·2	1·26	41·0	0·0	0·00	1·3	0·0	
Range	15·85	25·2	26·2	8·82	59·0	14·0	2·80			
Jan., Max ...	779·55	8·5	9·0	7·39	100·0	21·0	3·62	29·6	11·9	*From the 25th to the 28th* heavy gales prevailed almost continuously. The maximum rate of the wind, 16·3 mètres per second, was reached at 11.30 A.M. on the 27th.
Mean	771·24	1·17	1·36	4·36	85·5	7·8	30·69*	100·0*	3·5	
Min ...	765·06	−8·0	−8·2	2·14	44·0	0·0	0·00	0·2	0·0	
Range	14·49	16·5	17·2	5·25	56·0	21·0	3·62			
Feb., Max ..	772·92	13·3	14·4	9·04	100·0	21·0	3·08	19·7	13·0	On the 20th a magnetic disturbance was betrayed by all the compasses. The atmospheric pressure was likewise affected throughout the day.
Mean	767·62	5·32	5·74	5·64	84·3	8·9	41·47*	56.8*	3·8	
Min ...	760·52	−1·6	−1·8	3·71	38·0	3·0	0·10	0·2	0·0	
Range	12·40	14·9	16·2	5·33	62·0	18·0	2·98			
March, Max ...	771·49	20·4	22·1	13·56	100·0	21·0	5·19	8·5	16·6	On the 26th, tempest from 9.30 A.M. to 10 A.M. The maximum velocity of the wind was 17·7 m. per second. On the 25th, a thunderstorm; maximum velocity of wind, 16·9 mètres per second at 1.30 P.M.
Mean	764·39	9·02	9·47	6·92	79·4	9·1	78·98*	36·4*	4·7	
Min ...	753·60	−0·6	−0·6	3·32	27·0	3·0	0·29	0·1	0·0	
Range	17·89	21·0	22·7	10·24	73·0	18·0	4·90			

* Total for month.

N.B.—The maxima and minima under each month are those noted at the actual hour of observation, except in the cases of ***Rainfall*** and ***Evaporation***, where the maxima and minima mark the greatest and least amounts for one period of 24 hours. The means are those of the month, but it will be noticed that under the same two headings the *total* for the month is given instead of the ***mean***.

For the sake of convenience, I reprint the rules given before for the reduction of metric records.

RULES.

To reduce millimètres to inches, multiply by 3,937 and move the decimal point five places to the left.
To reduce degrees C. to degrees F., multiply by 9, divide by 5 and add 32.
To reduce mètres per second to miles per hour, multiply by 9 and divide by 4.

During October and the early part of November, a brief and limited epidemic of cholera passed over Shanghai. In the first week of October there was a suspicious case of fatal collapse at the General Hospital, and about the same time reports came in from the surrounding country to the effect that choleraic symptoms, followed by death, were prevalent among the natives. In the second week, three more cases were admitted to the General Hospital, one proving fatal. On the 17th a foreign child died of "choleraic diarrhœa," the post-mortem appearances leading to the conclusion that the case was one of true Asiatic cholera. Natives now began to come into the hospitals under foreign supervision, and died in some numbers, with vomiting, diarrhœa, and collapse. On the 23rd a foreign female in my practice was attacked with diarrhœa, which after seven hours and a half changed to ricewater evacuations, accompanied by vomiting and cramps. Intravenous injections of a saline solution, with subcutaneous injections of quinine, produced a good effect for a time, but the case proved fatal in twenty-eight hours from the first onset. On the same day the Health Officer addressed a letter to the Secretary of the Municipal Council (published on the following day) in which he urged the speedy and effectual removal of nuisances, and the need for care in the preparation of water used for cooking or drinking. Next day (25th) a rapidly fatal case occurred on board the ship *Guinevere*.

On the 26th the Commissioner of Customs issued a notification recommending the following precautions:—

As it is most probable that the contagion of this disease is in the present case communicated by water, no water should be drunk that has not been boiled, and if possible filtered. The boiling is by far the more important. The simplest way is to have a quantity of tea made every morning for use during the day instead of drinking water. A man who drinks water simply drawn from alongside the ship is seeking his death.

Exposure to cold, sleeping on deck, lying down in damp clothes, and especially lying about the streets at night, are particularly dangerous. Every one should wear a flannel band tied firmly round the belly, and should sleep in dry clothes under a blanket. The officers should see that no men lie on deck at night, and night leave on shore should be stopped except for men of known good character.

The contagion may be communicated by green vegetables dipped to freshen them in pools of stagnant water. It is therefore most imprudent to eat uncooked vegetables, but those that are thoroughly boiled may be eaten safely.

So soon as a man finds his bowels loose he should report himself, and the officer should at once give him 40 drops of laudanum in two tablespoonfuls of brandy. If the looseness continues, this dose may be repeated in an hour, while a doctor is being sent for. At the first appearance of vomiting or cramp or shivering, there is no time to be lost. Pack the sick man with blankets, put bottles of hot water round him, keep men rubbing the limbs that are cramped, and put a large poultice of mustard, or a piece of flannel with a couple of tablespoonfuls of turpentine dashed over it, over the lower part of the chest. These recommendations are meant only for the time spent in sending for a doctor. This should be the first thing done as soon as danger appears.

Be particular to put a ladleful of tar into the vessel put under the sick man, and let all his clothes and all cloths wet with his discharges be put at once in water along with tar or carbolic acid.

Printed copies of this notification were distributed by the Customs officers to every foreign vessel in the river. On the 29th and 31st October, and on the 2nd, 7th and 12th November, fatal cases occurred, one on each day, the last case being a Malay. The visitation then suddenly ceased. Previous to the removal to hospital of the cases which occurred on board ship, the discharges from the sick were poured directly into the river. This I ascertained, in two instances, by personal inquiry on board. So long as there is no sanitary authority afloat, any epidemic disease prevailing among the ships in the harbour is therefore likely to spread widely through contamination of the drinking water of the Settlement. Dr. LITTLE informs me—as a coincidence, not as an infallible indication for treatment—that the cases admitted to the General Hospital which did not prove fatal, recovered after large subcutaneous doses of quinine. Upon which fact it may be remarked,—1°, that some cases of cholera will recover, no matter what treatment is adopted; 2°, that the algid stage of pernicious remittents is indistinguishable from cholera by any diagnostic mark that I know of; and 3°, that there is a growing belief that cholera is in reality a fever allied to, if not identical with, the worst malarial fevers. Fifteen cases were admitted to the General Hospital, of which eight died. There were at least three cases, all fatal, in private practice,—one in my own, and two in the practices of other physicians who have given me the particulars.

An epidemic of measles occurred during the latter part of the half year. The cases were of rather more than average severity, but none were fatal. A considerable number of adults were attacked, and in these fever rose high, with delirium and much gastric disturbance. Slight catarrhal ophthalmia persisted in a few instances for some weeks, but so far as I know the sequelæ were generally trivial. Malarial fevers, chiefly of the intermittent type, prevailed during the half year, and a few cases of typhoid were also observed, some accompanied by pneumonia. It is probable that to a notable extent the late apparent increase in the number of cases of typhoid fever in Shanghai is due to the fact that cases which a few years ago would have been classed as "Shanghai remittent" are now more correctly referred to typhoid. During the winter, more or less severe attacks of bronchial and intestinal catarrh, dyspepsia, hepatic congestion, rheumatism and neuralgia were common. Small-pox was not epidemic. One case which occurred in a tide-waiter was remarkable for the fact that the patient had had the disease twice before, and bore three good vaccination marks on his arm. The health of the Customs staff was good. One man had an epileptic seizure which suggested the presence of tapeworm. A smart turpentine purge brought away an unusually perfect specimen of the parasite, and no attack has since occurred. A case of orchitis deserves a passing notice as it occurred immediately after a severe paroxysm of intermittent fever, lasted five days, during which time there was no recurrence of pyrexia, and on the sixth day suddenly disappeared with the contemporaneous renewal of the fever. Several cases of malarial fever came under observation, but none were of a very serious character. A case of acute nephritis which proved fatal is detailed farther on.

During the half year there were, as I gather from the sexton's private books (obligingly placed at my disposal by Mrs. TWIGG) and the Municipal Burial Register, 45 deaths, from which, subtracting 21 deaths among non-residents, we obtain 24 as the mortality among residents for the period. Eight deaths must also be subtracted as occurring among infants under three years old.

BURIAL RETURN OF EUROPEANS FOR THE HALF YEAR ENDED 31ST MARCH, 1876.

CAUSE OF DEATH.	OCTOBER.	NOVEMBER.	DECEMBER.	JANUARY.	FEBRUARY.	MARCH.	TOTAL.
Cancer (Internal),	1	1*	—	—	—	—	2
Diarrhœa,	1	—	—	1*	—	—	2
"Colic,"	1	—	—	—	—	—	1
Choleraic Diarrhœa.	1†	—	—	—	—	—	1
Cholera,	3* *f* 1	2* 1	—	—	—	—	7
Chronic Diarrhœa,	1*	—	—	—	1 1*	—	3
Enteric Fever,	1	—	—	—	—	—	1
Phthisis,	—	1	—	—	—	—	1
"Heart Disease,"	—	1*	—	—	—	1	2
"Continued Fever,"	—	*f* 1	—	—	—	—	1
Acute Nephritis,	—	—	1	—	—	—	1
Hæmatemesis,	—	—	—	1	—	—	1
Remittent Fever,	—	—	—	*f* 1†	—	—	1
Bronchitis,	—	—	—	—	*f* 2†	—	2
Congestion of Brain,	—	—	—	—	1*	—	1
Hepatic Obstruction,	—	—	—	—	1†	—	1
Alcoholism,	—	—	—	—	—	1	1
"Membrorum Distensio Infantilis,"	—	—	—	—	*f* 1†	—	1
Drowned,	—	2*	—	—	—	2*	4
Uncertified,	*f* 1† 1† 3*	1*	2	1* 1	1*	—	11
Total,	15	10	3	5	8	4	45

* Non-resident. † Infant under 3 years.

The mortality from disease among resident foreign adults is thus reduced to 16 (14 males and 2 females), as against 17 (15 males and 2 females) during the same period of last year. These deaths may be arranged as follows:—

Cancer, ... 1	Acute and Chronic Diarrhœa, 2	Colic and Cholera, . 3
Phthisis, ... 1	Continued (Enteric) Fever, 2	Heart Disease, . . 1
Nephritis, ... 1	Hæmatemesis, ... 1	Alcoholism, . . . 1
		Uncertified, . . . 3

The case of internal cancer which occurred in October was briefly alluded to in my last report. A scirrhous mass occupied the head of the pancreas, and the entire organ with its surrounding glands formed an indurated tumour faintly perceptible through the abdominal walls. I am in doubt whether the entire tumour was cancerous, or whether the enlargement of the body of the organ and the lymphatic glands may not have been due to chronic inflammation. Microscopic examination of the head of the gland left no question as to its character. No secondary deposits were discovered. The immediate cause of death was obstruction of the common bile duct with sudden jaundice. Death supervened seven days after application was made for treatment. This case occurred in the person of a Customs diver. It may be compared with another case, to be cited farther on, where death followed tuberculous obstruction of the biliary ducts in a child. The other instance of internal cancer was imported. The patient died exhausted by pain and inanition. Here the primary disease was cancer of the rectum. AMUSSAT'S operation

was performed, with the result of relieving pain and prolonging life for a few days or weeks. Extensive secondary deposits were discovered in the liver, which formed the basis of the note on the etiology of cancer, published by me in the last volume (p. 18). The case of "colic" was doubtless cholera. The patient died collapsed very shortly after admission, and immediately before the outbreak already described. The following notes relate to the case of acute nephritis fatal in December. The patient was a tidewaiter:—

W. F. sought advice on the 19th October, 1875. He had got a severe chill four days before, by exposing himself to a heavy shower after having been down for some considerable time in the hold of a vessel, where the temperature was very high. Complained only of cough, which yielded in a couple of days to pills of ipecacuanha and hemlock, with tartar emetic. On the 31st he returned, complaining of want of appetite and looking ill. He said he had vomited on and off ever since taking the pills, but had no pain nor diarrhœa; was sleeping badly, with obscure feverish feelings at night. Temperature normal (3 P.M.). Ordered a mixture of sulphate of quinine with citrate of quinine and iron. On the 18th November he reported that so long as he took the quinine he felt better, but on stopping it for a day his nausea and sleeplessness returned. His face suggested kidney disease. No pain anywhere. Pulse 90, small and hard; temperature normal. First sound prolonged at apex, no enlargement of heart. Liver dulness extended to two inches to left of middle line, and to one inch below costal border in line of nipple (lying down). Above it corresponded to the lower border of the fifth rib. No tenderness on deep pressure or on percussion. Urine highly albuminous, clear on being passed, but loaded with lithates. Ordered into hospital.

20th November.—A saline cathartic produced severe diarrhœa for several days, during which a mass of internal piles came down, giving great pain. It was necessary to give Dover's powder cautiously to stop the diarrhœa, but meanwhile hot baths were used assiduously, without, however, any effect on the character of the urine. A slight puffiness of the face noticed yesterday had disappeared, and there was no subsequent anasarca. On the 25th the diarrhœa, though continuing, was well in check. The Dover's powder was stopped, and a mixture of bark with bicarbonate of potash ordered. Hot wet compresses were kept day and night on the lumbar region in the intervals of the baths. Diet, chiefly arrowroot with chicken broth. A most careful examination this day by Dr LITTLE and myself failed to discover anything to add to the signs enumerated above, except a slight increase in the splenic dulness. There was no intercostal bulging, and deep percussion in the intercostal spaces failed to elicit any sign of pain or uneasiness. On the 30th blood corpuscles appeared in the deposit from the urine. Sleeplessness was now the chief subjective symptom. Ordered chloral at night. On the 5th December it was observed that after standing for a short time, a distinct coagulum appeared at the bottom of the vessel containing the urine. After filtering the cold urine, the filtrate gave at least one-fifth of albumen by bulk. Perchloride of iron was now given for two days without effect on the urine, but with the result of producing constant diarrhœa and a recurrence of the piles. On the 8th the patient was so much exhausted that he fainted in the warm bath, and could not be persuaded to take another. Iron stopped.

12th.—General symptoms unaltered, except that he is evidently running down rapidly. Appetite still good, in spite of frequently recurring nausea. Great thirst, for which he drinks Appollinaris water in large quantity. This evening, vomiting of clear light green fluid began, and continued at rapidly shortening intervals during the next two days.

15th.—As soon as he swallows anything it returns, accompanied by large quantities of the above fluid. Stools loose, natural in appearance, twice daily. Temperature always between 100° and 101°. Pulse 112, dicrotous. Complains of flying pains in his muscles, but fails to tell exactly where they are. Injected subcutaneously three times this day one quarter grain of acetate of morphia.

16th.—Pains disappeared; much less vomiting. Urine unaltered. Great difficulty in passing it. He makes several attempts, and can pass nothing; then suddenly comes a rush, and he passes a considerable quantity before the vessel can be fetched.

18th.—Pains and vomiting more violent than before, totally preventing sleep last night. Slightly delirious. He was removed, by the kindness of the Sister Superioress, to a private ward. Morphia half a grain injected twice. A good night followed.

From this out he sank still more rapidly, and died conscious on the 22nd, the skin having become slightly jaundiced on the 20th.

Post-mortem on 23rd.—Lungs and heart healthy. A small quantity of straw-coloured fluid in peritoneum. Liver enlarged, and anterior surface studded with small collections of thick yellow pus, varying in size from a pea to a Brazil nut. Entire organ gorged with blood. On endeavouring to lift it upwards and forwards, it tore away, leaving behind a bulging mass nearly colourless. Carefully cutting through this—which was evidently liver tissue condensed to almost cartilaginous hardness by great pressure—issue was given, at the depth of about $\frac{1}{6}$th inch, to an enormous quantity of pus, quite odourless and of laudable appearance. The quantity was, I should think, at least a quart; it filled the abdomen, and ran over on to the floor and table. The liver immediately collapsed, and the finger introduced into the cavity could gain little notion as to its former size. The spleen was almost black, and tore like a rotten sponge, dripping blood. The kidneys were slightly above the natural size. Interiorily they were hard, but the cortical layer was a mere pulp, tearing away with the capsule. In the middle of the left kidney, close to the pelvis, was a large hæmorrhage. Around each gland there was considerable injection of the peritoneum, and the serous layer of the small intestine was injected in several places.

This man had been passed by me as a candidate for the post of tidewaiter on the 31st August. His history, as given by himself, was as follows:—"Born 14th September, 1842, at Providence, R.I., single, "five years a seaman in China. Have never been seriously ill, and with the exception of an attack of "dysentery lasting fourteen days, have had nothing the matter since reaching China—no affection of the liver, "no fever, no affection of the chest, no syphilis, no rheumatism." After his death, however, I accidentally heard that during 1874 he had been under Dr. PICHON'S care, and having applied to Dr. PICHON for his recollections of the case, he very kindly gave me the following particulars:—

"He suffered last year from acute hepatitis, and in my absence was attended by Dr. GOTTBURG. "Two or three months afterwards a tumour, as to the nature of which there could be no doubt, presented "itself in the epigastric region. I ordered him home, on the chance of absorption taking place, and that he "might at all events be with his family when the abscess should be discharged. Four or five months afterwards "he returned with improved health to Shanghai, but took especial care to keep out of my way. However, "having seen him accidentally, I at once anticipated what must be his subsequent history." *

The British *Army Medical Department Report* for 1871 (pp. 274, 282, 309) contains notes of three obscure cases which may advantageously be borne in mind when diagnosing hepatic abscess. In one, gastric ulcer was diagnosed, the lesion being abscess of the right lobe. In a second, hepatic abscess was diagnosed, the lesion being right circumscribed empyema and right renal abscess. In the third there was no diarrhœa, no rise of temperature and no brain symptoms, yet the post-mortem revealed a large abscess of the right lobe of the liver, and extensive cerebral lesions.

* "Where hepatic abscesses are stoutly encysted they may remain for months, perhaps for years, latent, producing little or no constitutional disturbance. . . . A sergeant, invalided from India for chronic hepatitis, presented himself at Fort Pitt. He had to all appearance recovered so completely on his voyage from India that he was sent to the depôt for duty. Weeks afterwards, while straining at stool, 'something gave way,' and an hepatic abscess burst into the pericardium. . . . In another case, the patient had worked on a plantation at the Mauritius; he walked seven or eight miles in search of a fresh engagement, his health being apparently good. Suddenly he complained of a pain at the pit of the stomach, and died in a few hours; an abscess of the liver burst into the pericardium."—W. C. MACLEAN, in REYNOLDS'S *System of Medicine*, vol. iii., p. 334.

While on the subject of masked hepatic abscess, it is not amiss to refer to instances where all the symptoms point to suppuration of the liver, and yet recovery takes place with a completeness which sets aside almost every doubt as to the error of the former diagnosis. In No. 6 of these Reports (p. 35), Dr. REID gave an instance in point. The following cases have the same bearing:—

A. B., aged 36, fifteen years in China, chiefly at southern ports, always a free liver, and had suffered twice from acute dysentery—the last time in July 1871,—was seized in January 1872, with intense pain in the right side and both shoulders, absolute orthopnœa, agonizing cough, constipation alternating with mucous diarrhœa, anorexia, sleeplessness and night sweats. The hepatic dulness reached from the lower edge of the fifth rib to $2\frac{1}{2}$ inches below costal border in nipple line, and was continuous with the area of cardiac dulness. Right interspaces bulging. No breathing audible below middle of right scapula, and breathing very harsh above this point. Puerile respiration on left side. Gentlest percussion over liver region hardly tolerable. Temperature (a.m.), 100° to 100·5°; (p.m.), 100·5° to 101·3°. Treatment, twelve leeches to anus; large doses of neutral citrate of potash,—belladonna liniment on spongio-piline to right side. This afforded considerable relief. Suddenly, on the third day, a violent rigor occurred, followed, in three hours and a half, by another equally violent. Between the two the temperature was 104·6°. The suddenness and height of the febrile movement suggested an intercurrent intermittent; I therefore administered 15 grains of quinine in a single dose, and continued as before. Next day, one hour before the anticipated rigor, 10 grains of quinine was given, and there was no rise in temperature. On the third day the quinine was accidentally omitted, and there was a slight rigor in the afternoon. From this out, convalescence proceeded, the patient taking 10 grains of quinine nightly for three weeks. He is now (March 1876,) perfectly well.

A very high temperature in hepatitis, especially if of sudden onset, is therefore not an indication of suppuration. In a case of hepatic abscess, published by MACLEAN (*Lancet*, 1873; ii., 39) the highest temperature recorded was 99·9°. In a case of pure, uncomplicated acute hepatitis (*ibid.*, p. 40), the only temperature recorded was 101·4°. The highest temperature noted in a case published some years ago by me (*Customs Medical Reports*, No. 6, p. 64), was, before operation, 102°. MACLEAN (REYNOLDS'S *System of Medicine*, iii., 332) gives the rise in hepatic abscess as from 1° to 3° F.; and MOREHEAD (*Researches on Disease in India*, pp. 374, 376), says "some "degree of febrile disturbance generally continues throughout the course of hepatitis . . . . slowly "developed hectic fever affords almost conclusive evidence that suppuration is in progress."

G. R. D., æt. 29, a native of Gosport, went to sea at 14 and has been at sea ever since, serving in the English navy in the West and East Indies, Australia and China. First reached China in 1865. Had had good health in service; only once laid up with scarlatina in 1866. Left navy in November 1872, and joined Customs at Amoy, being then in excellent health. Continued in good health until winter of 1873, when four days after a thorough drenching and being obliged to remain in wet clothes all night, severe pain with considerable swelling in right side occurred. Had also much fever and sleepless nights, the side being very sensitive to the touch. Was scarified with cups in six places (72 incisions) over seat of pain, followed by hot bran poultices. Was kept on slops and took a bitter mixture. Was fit for duty in about a month, feeling quite well again. Continued so until June 1875, when shortly after violent exercise at a regatta the former symptoms returned, with severe fever. Dry cupping was now used, with blisters over the painful part; low diet and a bitter bottle. This attack also lasted for a month, shortly after which was ordered to

Shanghai. After about three weeks of night duty during wet weather, the symptoms again recurred with violence.

14th Oct. 1875.—Slight jaundice, bowels constipated, acute pain in right side and right shoulder exasperated by deep inspiration; temperature, 100°. Intercostal spaces bulging, and general fulness of hepatic region. Dulness from fifth rib to 2½ inches below costal border, standing. Pain chiefly referred to area about size of a dollar, immediately below ribs, and to a point corresponding to the third rib, just above nipple. Urine loaded with lithates; no albumen. Bicarbonate of potash with bark, and Friedrichshal water every second morning.

Improved in a few days.

8th Nov.—All symptoms returned, with agonizing pain in regions indicated. Sleepless; temperature 102°. Liver dulness from a little above fifth rib to three inches below costal border, but difficult to define, as percussion was so painful. Six leeches to anus, a blister dressed with blue ointment over lower seat of pain, and bicarbonate of potash with antimony, magnesia and taraxacum.

11th.—Antimony omitted as it caused constant nausea. Symptoms abated after a series of short rigors lasting over an hour. Temperature (p.m.) 100°. Much bulging and great local tenderness.

20th.—Very little change. To take twenty grains bromide of potassium in compound infusion of gentian thrice daily. Immediate improvement. Pain, except in upper spot, ceased at once.

27th.—Liver dulness receding; extends from middle of fifth rib to 1½ inch below costal border. Extremely painful spot 1½ inch below sternum. Blister. Bromide increased to 25 grains thrice daily. To take every night a 50-gallon nitro-hydrochloric acid bath, containing 15 ounces of nitric acid and 10 ounces of hydrochloric acid.

20th Dec.—Returned to duty.

26th.—(Standing.) Dulness from upper border of sixth rib in mammary line to one inch below costal border. No pain on percussion. Quite well.

In one of the fatal cases of bronchitis in infants, the child was rapidly convalescing from a severe attack, from which at an early period recovery seemed hopeless. Suddenly, while turning round to laugh at its nurse, it coughed up a quantity of mucus, drew it back into the larynx, and was almost immediately suffocated. Reference has already been made to a fatal case of hepatic obstruction in a child; the following are the particulars:—

—— aged 18 months, had been a little out of sorts for two or three days, sleeping restlessly at night, constipated. On the 15th February 1876, his stools were observed to be white and pasty, and his skin yellow. I saw him next day, by which time the entire body was a deep olive. Conjunctivæ yellow; very restless. No heat of head; lower lateral incisors apparently pressing—lanced. No appetite; takes breast only. Ordered warm baths and a mixture of soda, rhubarb and sulphate of magnesia. On the 17th he had passed several constipated white motions; was more lively and had slept better. On the 18th the skin was clearing a little. The stools continued constipated, but were slightly coloured. For the next two days there was no apparent change, but the skin acquired a greenish tinge. On the morning of the 21st he began to scream violently and vomited everything he swallowed. Had passed a sleepless night. One fairly good passage after soap suppository. Head cool; eyes half open, no strabismus. In the evening worse; hot bath, skin to be rubbed with warm oil; a powder containing 1 grain calomel with ⅔ grain Dover's powder every second hour for three doses. 22nd.—Constant vomiting of bright yellow, tenacious fluid. Belly tender all over on pressure. Constant screaming and tossing about. Careful examination failed to detect hernia at any of the openings. Eyes half open, skin very dark. Ointment of mercury (1 part to 7) rubbed over abdomen. After this he slept a little. Left upper lateral incisor apparently pressing—lanced. From 10 a.m. every hour, for half-an-hour at a time, there were violent bilateral spasms, with reiterated cries.

Temperature normal. In the afternoon the skin had cleared considerably. Hot mustard fomentations to abdomen. There was absolute constipation, but no evidence of obstruction on careful palpation. Tongue dry and black. Rhythmical movements of tongue, head and hands. No strabismus. Pupils oscillate rather unsteadily under light. Condition remained unchanged until 10 p.m. when three grains of calomel was administered. Two loose, creamy motions followed almost immediately, and the child began to vomit grumous bloody fluid. He became more and more deeply comatose, and died at 2.15 a.m. on the 23rd. The attendants stated that the body became warmer after death.

Post-mortem, ten hours after death.—Surface of body covered with ecchymoses. Abdomen only examined. General peritonitis. Three or four drachms of yellow serum in pelvis. Bladder distended. Liver reached to 1½ inch below costal border and 1½ inch into left hypochondrium. Bled freely on section. In the neighbourhood of the transverse fissure the ducts distended with bile were clearly mapped out. Gall bladder much distended. Rectum and colon empty. Several extravasations of blood under visceral peritoneum at mesenteric border of rectum. Omentum and mesentery greatly injected between cæcum and pylorus. Eleven invaginations of small intestine, mostly trivial, but two at 18 and 26 inches distance from the pylorus were each 3½ inches long and unfolded with difficulty, lymph being interposed between the layers. The corresponding portions of the mesentery were purple. Cystic duct obstructed by a nodule on the peritoneal surface half the size of a pea, which prevented a fine probe from passing through. The hepatic ducts were imbedded in a mass of hardened glands, which occupied the transverse fissure and were continuous with a mass between the layers of the lesser omentum. The bowel above the highest invagination contained a creamy fluid. Between the invaginations it was distended with gas, and was empty below the lower of the two. All the mesenteric glands were enlarged and soft on section.

Had this complete obstruction of the biliary ducts continued for any length of time without proving fatal, one would have expected to find a commencement of cirrhosis. Here there had been no time for fibrous transformation nor even for atrophic changes, the immediate cause of death being probably the general peritonitis.

The following note of a case of hemianæsthesia has been sent me by Dr. BARTON:—

Mr. M——, aged 24, went to bed quite well on the 19th June 1876, and on waking next morning found all sensation gone from the entire left side of the body; also deafness on the left side. Giddiness was complained of; pupils natural. The general health was undisturbed, muscular movements unaffected and quite normal. The subject of this attack is strong and robust, an officer on board a local steamer, and slept in the main cabin or saloon with the skylight open, and awoke during the night shivering, owing to the bed-clothes having fallen off. There seems to me no doubt that this attack was owing to the cold air acting on the spine. Giddiness persisted for three or four days, from which period the symptoms began to improve. Friction to the spine with compound camphor liniment, and internally a mixture with nitre, affected a cure in about ten days. I consider this case worth recording, as it is not the only one of paralysis caused by the late extreme cold. Paralysis of the nerves of sensation supplying half the body is, as far as I am aware, a rare affection. Complete hemiplegia is often met with in Europe but seldom in China.

Dr. BARTON also informs me that during the month of December he had under his care three cases of aortic aneurism, aged respectively 33, 36 and 40. To the same gentleman I am indebted for a note supplementary to Dr. JONES's paper on milk secretion under unusual circumstances, published at page 15 of the last number of these Reports.—

A young bitch under my observation had a few months ago a litter of puppies which she was disposed to ill-use or neglect. Her mother, who had not had pups nor been with a dog for more than two years,

immediately took charge of them, and drove away the real mother. Her dugs rapidly enlarged, and within a few days she had a plentiful supply of milk, with which she reared the family.

The following case, though terminating fatally, or perhaps for that very reason, is instructive :—

A jinricksha driver, 38 years old, was admitted to the Gutzlaff Hospital on the 2nd March 1876. He was feeble, but his general health seemed good. He suffered from a tumour about the size of a closed fist, which occupied the superior and inferior carotid triangles and the anterior portion of the subclavian triangle on the right side, and which he was anxious to have removed, as "it prevented his sleeping for more than a few minutes at a time, by threatening to choke him, especially if he happened to turn on his left side." It had been growing for several years without fluctuating in size, but it was only within the past two months that it had interfered with his sleeping. He had wasted greatly in consequence of want of rest. On examination the tumour was found to be very deeply seated ; it could not be isolated from the sheath of the carotid vessels, appearing to be adherent to it or to have burrowed behind it. Posteriorly, it seemed to be in contact with the spine, but digital examination of the pharynx produced so much spasm that nothing could be discovered by exploring within the mouth. Its upper and anterior border was about three finger-breadths below the lower jaw. Inferiorly, it dipped behind the clavicle, but its lower border could be defined by drawing the entire mass upwards. Its internal edge was in contact with the trachea, which was healthy and not displaced. It did not share in the movements of the trachea except to a very limited extent. There was no difficulty in swallowing, and the act of deglutition communicated no motion to the tumour except what was due to the general movement of the neck structures. It was strictly limited to the right side. The sterno-mastoid was partially pressed backwards, but the bulk of the tumour lay under it. The right common carotid pulsated visibly, and the area of pulsation could be displaced by moving the tumour. There was no marked dilatation of the skin veins. On palpation the tumour was inelastic, giving, however, a sensation of deep fluctuation at its upper part. Its deeper portions seemed solid. Compression had no effect in diminishing its size. Neither pulsation nor bruit could be detected.

The patient was kept under observation for four days, with the result of confirming his statement as to his inability to sleep. In spite of the difficulties which surrounded the diagnosis, and at the patient's earnest solicitation, I operated on the 6th March. A long incision was made over the most prominent portion of the tumour, nearly parallel to, and a little to the inner side of the anterior edge of the sterno-mastoid. The layers of fascia and the platysma being divided on a director, the tumour was brought into view; the anterior belly of the omo-hyoid stretched over its upper margin, and the sterno-thyroid, which was extremely thin, was displaced towards the left side. The fact of its being a tumour or hypertrophy of the right lobe of the thyroid body was now evident, and the question arose as to the removal of the entire gland. But it would have been impossible to effect this through the actual incision, while the very slight connexion of the tumour with the trachea rendered it possible that the isthmus was either very narrow or perhaps altogether wanting. Deep exploration with the finger and handle of the scalpel separated the growth easily from the carotid sheath, from under which it had to be drawn; and a like careful dissection separated it from the trachea between the points of ingress of the superior and inferior thyroid arteries. At this moment I unluckily wounded one of the superior veins, the bleeding from which was so violent that I was obliged to tie the vessel. Thereupon the tumour swelled enormously, resembling a mass of placenta as it lay turned out through the wound. The superior vessels were now, as far as practicable and as quickly as possible, isolated from the surrounding tissue, their fine fibrous investment, as well as the interlying connective tissue, being carefully respected. Around this pedicle, and as high up as possible, a stout silk ligature was thrown, and another was placed half-an-inch below. While these were drawn tight, a similar attempt at isolating the inferior vessels was made, but could not be so completely effected. Around the lower pedicle a whip-cord ligature was placed and drawn

tight, while I removed the intermediate portion, leaving stumps of about half-an-inch above and about three-quarters below. The lower stump was then cautiously transfixed with a blunt director, and an elastic ligature drawn through, which was knotted at each side. One stitch was introduced to keep the edges of the skin in position.

The tumour, which involved the entire right lobe of the gland, weighed, when drained of blood, a few drachms over thirteen ounces. It was completely solid, containing no cyst. The hæmorrhage was severe, but would have been comparatively trivial but for the wounding of the vein.

The dressing consisted of a fold of lint wrung out of sweet oil, covered by another fold wrung out of a twenty-per-cent. solution of carbolic acid in oil, over which was placed a pad of oakum, and the entire was supported by a cravat of cotton cloth pinned in front. Half a grain of morphia was injected subcutaneously twice daily until the 10th, when the circulation becoming much stronger it was increased to three-quarters of a grain, and 30 drops of landanum were given each night. The patient was an old opium smoker. The diet was milk and raw eggs. On the two days following the operation there was afternoon fever, which yielded to quinine. Appetite was good after the first day, and the patient slept well after the first night. On the 9th, suppuration being fully established and the pus being extremely offensive, the wound was syringed out frequently with a five-per-cent. solution of carbolic acid in water. The upper part of the wound had united. The bowels having been confined since the operation, a dose of castor oil was given.

From this date until the 17th everything progressed most favourably. The ligatures separated on the 16th and the wound was apparently filled with granulations. The diet remained unchanged, and absolute rest, even to the use of a bed-pan, continued to be insisted upon. It was impossible, however, to keep the patient in bed. On the afternoon of the 19th, during the absence of the native assistant, he went into an adjoining room to a stool, where he appears to have passed a very constipated motion. Half-an-hour after he was left, the assistant returned, and found him lying across his bed, quite dead. As nearly as could be judged, there was about half-an-ounce of blood on the dressings. No post-mortem was allowed.